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Report of

**The Maryland Agricultural Society—
The Maryland Farm Bureau, Inc.**

INCLUDING REPORTS OF THE

**Maryland State Horticultural Society,
Maryland Crop Improvement Association,
Maryland State Beekeepers' Association,
Maryland Vegetable Growers' Association,
Maryland Stockmen's Association,
Maryland Tobacco Growers' Association,
Maryland State Poultry Council,
Associated Women of the
Maryland Farm Bureau,
4-H Club Conference.
Maryland Nurserymen's Association**

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REPORT OF
MARYLAND
AGRICULTURAL SOCIETY
THE
MARYLAND
FARM BUREAU, Inc.

Including Reports of

The Maryland State Horticultural Society
The Maryland Crop Improvement Association
The Maryland State Beekeepers' Association
The Maryland Vegetable Growers' Association
The Maryland Stockmen's Association
The Maryland Tobacco Growers' Association
Maryland State Poultry Council
Associated Women of the
Maryland Farm Bureau
4-H Club Conference
Maryland Nurserymen's Association

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BALTIMORE, MD.

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Vol 29

SEP 14 1945 GIFT

R.S.

LETTER OF TRANSMITTAL

To His Excellency, Herbert R. O'Connor,
Governor of Maryland.

Sir:

I herewith submit to you, as directed by the Act incorporating the Maryland Agricultural Society, and also the Horticultural Society, this report for the year 1944, which contains a detailed statement of the receipts and expenditures of the Society as approved by the Executive Committee and Advisory Council. It contains the proceedings of the Twenty-Eighth Annual Meeting of the Maryland Agricultural Society, Maryland Farm Bureau, Inc., and annual meetings of the Affiliated Associations.

I trust that an inspection of its contents will convince you that the funds appropriated for this purpose have been wisely and judiciously expended.

Respectfully submitted,

CHARLES E. WISE, Jr.,
Secretary.

March 16, 1945
Baltimore, Maryland.

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Maryland Nurserymen's Association

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Secretary, Paul Hofmann.....Towson, Md.

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REPORT
OF THE
TWENTY-NINTH ANNUAL MEETING
Maryland Farm Bureau, Inc.

January 11-12, 1945

President R. C. F. Weagly requested H. H. Nuttle to open the session with prayer.

MR. NUTTLE: Father in Heaven, we would not presume to start this Convention without asking Thee for Thy presence with us. We need a share of Thy wisdom to guide us in what we do; we need a part of Thy strength to help us carry out our plans. We need a share of Thy spirit that we may help each other to do the things that must be done. All this we ask as we proceed with this Convention. At the same time, we ask Thy blessing upon the President and Congress, and the world-wide leaders that this war may soon be ended and our boys be brought back and a lasting peace may be formed, and we ask all this in the Name of Thy Son, Amen.

MR. WEAGLY: It is a pleasure to me to present to you this morning a former President of the Farm Bureau, who will act as your presiding officer, Mr. P. C. Turner.

MR. TURNER: Mr. President, ladies and gentlemen: I am sorry there are not more here this morning because we have a very fine program. I note that all the speakers at this morning session are given 15 minutes; some of them could speak an hour and entertain us. I could speak a long time in introducing them, but we are late in starting, and it is my job to get along pretty fast.

First on this program is a representative of the great Insurance Company that we have in our midst. That Insurance Company has become great through the united efforts of its officials and the Farm Bureau. They have their offices together, and they work together, and in these trying times they are going to help the farmers very effectively. Zach Turner, the manger of the Insurance Company in Maryland would be the speaker, but he has been ill and he is fortunate enough to have such a head man as Henry K. Westphal to act as first supervisor and speak for him. Mr. Westphal.

MR. WESTPHAL: First, I want to extend the regrets of our State Agent, Mr. Turner. He hopes to be with you at the banquet tonight. He has asked me to present his greetings, and to make this report in person. Before I do this I want to thank the Maryland Farm Bureau for its generous, loyal support, and to congratulate it upon the job which it is doing for agriculture and its enlargement of membership.

Mr. Westphal then read the following:

FARM BUREAU INSURANCE ACTIVITIES

HENRY K. WESTPHAL, Field Supervisor

The year 1944 marked another year of eventful progress for the Farm Bureau Insurance Companies in Maryland. We in the insurance company are ever mindful that the progress enjoyed by the insurance group is due in a very large measure to the splendid, loyal support which we enjoy from the Maryland Farm Bureau, as is manifested through their able leaders, Mr. R. C. F. Weagly, President, and Mr. C. E. Wise, Jr., Secretary-Treasurer. The support of the Maryland Farm Bureau field men, Martin Sutton and Wilbert Smith is also recognized and appreciated.

We have faced difficulties, too, such as shortage of manpower and lack of gasoline in sufficient quantities to do the job as well as it should be done. Your understanding and indulgence in these matters merits and receives our recognition.

Notwithstanding these handicaps, your insurance program has forged ahead until today over 35,000 Maryland policyholders are protected by Farm Bureau. Fifty different kinds of protection are now available to the Farm Bureau members and their friends, including Life, Auto, Fire, Accident and Health, Hospitalization for both individuals and families, Farm Liability, Workmen's Compensation, Products' Liability, Personal Liability, Garage Liability, Group Insurance in all of its forms, Burglary and Robbery, and many other lines.

All three Farm Bureau Companies—Auto, Life and Fire, enjoy our excellent rating in Best Insurance Guide which stands as mute evidence that Farmers can operate big business successfully. The Automobile Company now ranks fourth among all mutuals and eleventh among all companies, *stock* and *mutual*, in automobile insurance premium volume and in 1944 the volume of new business written in Maryland increased by 2,600 coverages over and above 1943 writings. This was in spite of the fact that no new cars were manufactured and gasoline and tire rationing reduced driving considerably.

Farm Bureau now writes more automobile insurance in Maryland than any other company and its premium income is greater than any two companies combined in our state.

The Fire company, too, had an excellent year with new business scoring a 33% increase over 1943. Fire and extended coverage bring added protection to many farm homes, barns and outbuildings.

The Life company made a most enviable record, becoming the first life insurance company in America to place \$100,000,000 of business in force in less than ten years. We attained that goal in eight years. Approximately \$2,000,000 of new life insurance was written in Maryland in 1944.

A line that is gaining many new friends among Farm Bureau members in this state is Farm Liability insurance. With this policy the farmer protects himself from such hazards are:

1. Accident caused by his livestock straying upon highways.
2. For damage to his neighbor's crops caused by his cattle or livestock's straying from home.
3. Injuries caused by his ferocious dog or vicious bull.
4. For personal injury or property damage caused by his tractors.
5. For injury caused through his negligence to persons visiting his farm.

These and many other reasons make it apparent to intelligent farmers that they have a real hazard on their farm which they will protect against, through Farm Liability insurance.

In closing, let me say again, that we appreciate the opportunity to work with you men and women who are laboring so diligently that our nation at war may be fed and I thank you for your support of our great insurance program. We have accomplished great things in the past, but let us take that as a reminder that the future offers an even greater reward and responsibility. With your continued support even greater heights will be attained.

MR. TURNER: Thank you, Mr. Westphal.

It gives me a particular pleasure to present the next speaker. She is a lady with a dynamic personality. She gets around this state regardless of everything. She has been in every county, riding buses, trains, with any kind of a vehicle, must have done some hitch-hiking, also. I present Mrs. C. J. Kern, President of the Associated Women of the Maryland Farm Bureau.

ANNUAL REPORT OF ASSOCIATION WOMEN

MRS. C. J. KERN, President

Following the annual meeting of the Associated Women of Maryland Farm Bureau last January, breakfast meeting of our Executive Board was held, attended by Mrs. Sewell, our beloved National Administrative Director, Mrs. Weagly, as National Vice-President, and Mrs. Ellis, Farm Home Advisor of Southern States Cooperative, as our invited guests.

The purpose was to develop a program of work for the Associated Women for the year 1944. A round table discussion was held, and each woman was asked her opinion on what she thought the most important projects to be considered. We were all impressed with the unity in thought expressed, since there were those present representing County, State, and National Farm Bureau. Several definite goals were set, the first of which was "23 organized groups of Associated Women by January, 1945." It makes me very proud to be able to report that due to the wholehearted cooperation of the Associated Women Chairmen, our Vice-President, Mrs. Flook, the Officers of the County Organizations, and the assistance of Mr. Smith and Mr. Martin Sutton, this goal has been reached. We feel now that we women are in a position to help advance the cause of Farm Bureau wherever our assistance is needed.

Our second State goal was to pledge our help in every way possible toward the acquisition of membership in order that Maryland may meet her million member goal of "8,000 or more for 1944." The Associated Women in many of our counties have made outstanding records as solicitors. The Allegany County Organization has assumed the obligation of all membership work, for which they are to receive a payment of 50 cents per member for their treasury. We are wishing them much success in their new responsibility.

The third project toward which we pledged our assistance was the organization or development of new planning groups. We feel that our Associated Women should take the major role in this work, since cooperation of the women to serve as hostesses is the first essential. To date, there has been one new planning group reported by Wicomico County Farm Bureau; our hats are off to Wicomico for being the first, and we have sown the seed at every opportunity, and we feel that ground work for new groups has been laid in many counties. I shall be glad to assist in this work in every way for "Development of Planning Groups" is Project Number 1 in the program of the Associated Women for the new year. We should have at least 50% of our membership organized. At the National Meeting, the State of Michigan reported a full-time paid woman organizer in the work of their Associated Women, and we feel that would be a very profitable investment for any State.

District meetings have been held in five of the six districts of the Associated Women's organization. A luncheon followed by a business meeting was planned by each district director for the county presidents and one other officer or outstanding associated leader. District Number 1, comprised of Garrett, Allegany, Washington, and Frederick, met in Hagerstown; District Number 4, Cecil, Harford, and Baltimore, in Towson; District Number 2, Montgomery, Carroll, and Howard, in Baltimore; District Number 3, Anne Arundel, Charles, Calvert, and Prince George's, in Upper Marlboro; and District Number 6, comprised of Dorchester, Worcester, Somerset, and Wicomico, met in Salisbury. Sev-

eral of these meetings were attended 100%, and it was the unanimous opinion of everyone that much valuable information was gained, besides affording an opportunity for adjoining county leaders to really get acquainted. We plan to continue such meetings in the coming year.

The Associated Women of Maryland made a contribution of \$765.00 to the National Clubmobile Fund, an outstanding achievement, we feel, for the size of our State. This figure represents contributions from 20 of the 23 counties, two of which merit honorable mention: Wicomico, Mrs. Edgar Williams, President, contributed \$175.00; Caroline, Mrs. Boone Jarrel, President, sent \$177.50. The Homemakers' Clubs of Caroline each sent a donation to the fund, totaling nearly 50% of the contribution, a fine example of an accomplishment with Farm Bureau and Extension working together.

One outstanding event of the year was the privilege of representing our State at the first National Farm Bureau Institute, held in Urbana, Illinois, from September 3rd to 9th. In my estimation this was one of the most worthwhile projects ever sponsored by our organization. There should be some financial arrangement made between the counties and our State organization to enable Maryland to have her full quota of students in attendance at the Institute each year, where such splendid training courses are provided for the guidance and inspiration of both old and new leaders. You just can't attend an Institute without becoming a Farm Bureau convert in the truest sense of the word.

I was able to attend each of the Conferences of the Northeast Regional Group, where one has an opportunity to compare notes with the officers of the various State organizations. We were proud of the fact that Maryland had the largest delegation in attendance at the Leaders' Conference in August, and we want to urge more of our county organizations to send representatives who can bring back to them a comprehensive report of the progress being made at such meetings. The Presidents of your Associated Women would welcome such an assignment.

Other activities of your State officer include two meetings of the Post-War Planning Group and attendance at all Directors' meetings of the Maryland Farm Bureau, one of which included the twenty-three Associated Women Presidents. An executive meeting of the Associated Women's Board was held in Baltimore on November 28th to plan the program for our annual meeting held yesterday. I also attended the Conservation Forum, and the annual meeting of the Homemakers, which was held in Baltimore. I accepted an invitation to the Baltimore County Achievement Day program of the Homemakers, where I talked before a group meeting of the Associated Women. I was interested to attend the annual meetings in Montgomery and Charles Counties, and I have participated in the banquet programs of Wicomico, Kent, Talbot, Caroline, Allegany, Garrett, Dorchester, and Worcester. It was also

my privilege to serve as a judge at a very fine baby show held in conjunction with the Talbot County picnic.

Since 1939 we have contributed \$50.00 in five ten-dollar awards to five outstanding 4-H girls. It has been my privilege to make the presentations for the past two years at the annual 4-H Club Day held in College Park. We consider it a privilege to cooperate in every way possible with all rural youth programs sponsored by the various organizations of the State.

The real highlight of the year was the opportunity to attend the National Convention in Chicago. At the request of Mr. Jost, Organization Director of the Northeast, I participated in a Forum, which was a part of the program of the Organization and Membership Conference. Representing Maryland as a member of the Northeast Region, my assignment was to bring to the attention of the various State organizations represented the important part women could and would play in helping to build organization, if they were given proper recognition by the men of Farm Bureau. I was, of course, proud to be able to report the outstanding work the Associated Women of our State have been doing.

Due to the increased membership in our State Farm Bureau, the Associated Women were entitled to two voting delegates at the National. Mrs. Weagly had been named as our representative at the 1944 annual, and I'm sure you all know how happy I was to serve as the second delegate, and to cast our State's vote for our own Mrs. Weagly who was unanimously elected President of the National Organization of Associated Women. We, the women of Maryland Farm Bureau, are justly proud of the honor which has come to her and to our State, and extend to her our sincere wishes for success in her new office.

The past year of service as State President of the Associated Women of Maryland Farm Bureau will linger in my memory always as one of the most interesting and delightful years of my life. Maryland has hosts of fine people as Farm Bureau leaders, from Garrett County in the extreme west to Somerset on the southern tip of the Shore. It has been my privilege to visit practically all of the 23 counties, helping with organization work, holding district meetings, and attending annuals and banquets, where I have been received most cordially and extended the finest of hospitality. Traveling over the State has been a real education, for I have learned much of its geography, climate, and crops, which I had only known through reading. It has been a most worthwhile experience to me personally, and I trust my services have been helpful to Farm Bureau.

MR. TURNER: That was a very fine report, Mrs. Kern. Most of us realize that the women have helped materially in building up the Farm Bureau membership in the State.

The next speaker will be presented twice, so I am going to hold back on what I say about him now. He is going to give you a brief analysis

of the Tax Report which will be presented to you tomorrow at the business session. On that committee he had the help of Dr. DeVault and Mr. Walker. I know the work of that committee. They use that report as a textbook down at Annapolis. The General Assembly is guided largely by that report. I now present Mr. Wise.

ANNUAL REPORT OF THE JOINT TAX COMMITTEE OF THE MARYLAND FARM BUREAU, INC., AND MARYLAND STATE GRANGE

(A Digest)

We should think about the problems in the post-war period. It is certain that taxes will continue to be relatively high but this Committee believes that some downward revision of Federal taxes in the post-war period is advisable.

Federal expenditures have increased after each war. Increasing costs of governments should be offset as much as possible by economies in government. Such economies may come from elimination of some wartime and other Federal agencies after their useful purposes are past. They may come also from elimination or consolidation of those agencies within or among governments which duplicate or perform essentially the same services.

We recommend that consideration be given to state-wide legislation which will give taxpayers the opportunity to express themselves regarding proposed budgets before they are adopted by local authorities.

Trends in State Tax Revenues

The aggregate yield of the important state taxes has decreased from a peak of \$51,277,000 in 1941-42 to \$45,213,000 in 1943-44.

Income tax collections from corporations for the fiscal year ending in 1944 were more than twice the amount collected during the fiscal year ending 1940, even though the rate remained constant. With income tax rates on individuals in 1944 one-half of those in 1940, collections from individuals were slightly higher in 1944 than in 1940.

Property taxes have decreased from \$5,300,000 in 1941 to \$2,925,000 in 1944. Gasoline taxes in 1944 amounted to about 75 percent of the peak amount collected from that source in 1942. Taxes from corporations have increased materially in recent years. Alcoholic beverage taxes and insurance taxes have also increased gradually. Other tax revenues have been relatively stable during the past four years, except the motor vehicle titling tax, which is less than one-fourth of what it was four years ago.

Trend in Local Property Taxes

Average county tax rates in Maryland have changed only slightly during the past several years. The average combined state and county tax rate in 1929-30 was \$1.83 per \$100 of assessed value. By 1934-35 the average rate had decreased to \$1.21. In 1940-41 the rate had climbed to \$1.50, but it is now \$1.35.

Assessment Problems

About one-fifth of the properties in the counties are being assessed in 1944 under the new continuous assessment plan. Thus far, the results of the assessment indicate an increase in farm personal property assessments because of more livestock on farms and higher unit values. It is estimated that farm real estate assessments have been increased by an average of 10 percent. (This applies only to those election districts reassessed during the last year or two.)

Differences have appeared in the rates applied to similar kinds of livestock in the various counties. More emphasis is given to, and higher assessments are placed on, purebred livestock in one county than in another. There are differences in opinion as to whether farm real estate assessments should follow the upward trend in farm values.

The Committee feels that some definite policy must be pursued in the assessment of both real estate and livestock to prevent the continuous method of assessment from resulting in greater rather than less inequalities.

Several counties are experimenting with assessing buildings on some unit basis, such as square foot or cubic foot basis. Caution should be exercised in applying such technique until it is proved to result in value determination comparable to the use value of buildings and the value they add to farm land.

State Income Tax

This Committee believes that the state income tax law should be fully utilized to reduce state real estate taxes and to build up a surplus for post-war governmental purposes. We, therefore, recommend that the income tax rates be restored to those rates in force before being reduced by legislative acts in 1943. The State should take full advantage of obtaining from higher incomes a reserve for the post-war readjustment period. If Federal income taxes rates are lowered, the full state rates can be restored without undue hardship, since the state income tax is insignificant when compared with the Federal income tax.

Forest Taxation

A properly devised forest taxing program will assist in protection and improvement of our woodland and forests. Little attention has been

given to an equitable method of taxing such properties. In many counties woodland is assessed at rather uniform rates per acre regardless of age and condition of trees or soil types.

We need to develop a taxing program which will provide an incentive for reforestation of cut-over lands, proper management of our woodlands, and discourage the exploitation and mismanagement of such resources.

Some type of severance or yield tax on forest products, together with property taxation, would provide the proper basis for encouraging the conservation of this agricultural enterprise.

Financing Education

The emergency with respect to difficulties in maintaining adequate personnel for our educational institutions still exists. We, therefore, reiterate our stand taken last year on this matter and recommend a continuation of the program to augment the salaries of teachers and employees of state-supported educational institutions after April 1945, so long as the emergency exists.

Social Security Program

We are opposed to the building up of tremendous surpluses in the social security fund to the effect that beneficiaries would get only a portion returned. This program should not be used as a shield in supplying revenues for other governmental purposes. After adequate reserves are built up in the fund, the rate of tax should be such as to balance the income and outgo.

Recommendations

1. That assessing authorities set up more uniform standards or bases between counties and within the counties for assessing livestock and farm real estate.
2. That the state income tax rates be restored to those in force prior to reductions made by legislative acts in 1943, in order to reduce state real estate taxes and to provide additional funds for post-war projects. It is further recommended that more liberal exemption be provided for members of the armed forces, especially in regards to mustering out pay.
3. That some downward revision be made in Federal income taxes in the post-war period to assist in maintaining a high national income and full employment.
4. That the three percent Federal normal tax on adjusted gross income, which replaced the former Victory tax, be discontinued and be made a part of a single minimum standard rate.

5. That the Federal motor vehicle stamp tax be abolished.
6. That the present program of augmenting the salaries of public school teachers and employees of state-supported educational institutions be continued after April 1, 1945, so long as the emergency exists.

D. G. HARRY, Chairman	A. G. ENSOR
C. E. WISE, JR., Secretary	EDWARD F. HOLTER
R. C. F. WEAGLY	TOBIAS E. ZIMMERMAN
T. ROY BROOKES	JOHN C. WARD
P. C. TURNER	H. S. LEAVERTON
H. H. NUTTLE	WILLIAM LEDBETTER
T. B. SYMONS	S. H. DeVAULT
H. J. PATTERSON	W. P. WALKER

MR. TURNER: That was a very good report. The next speaker was with me at the tenth annual meeting of the Northeast Farm Bureau in New Hampshire. That meeting lasted five days; we were in one county for one meeting, then went to another the next day, and we kept that up; it was a killing job. The bright feature of it was that Nelson Yost accompanied me on that jaunt over the counties of New Hampshire. I only knew him casually before, but I was with him constantly night and day for five days, and I found him a good fellow, a bright man, a first-class speaker, and he will now address you.

ADDRESS

NELSON YOST

I am pleased to be here, not only as a member of the American Farm Bureau, but also as a member of the Northeast Farm Bureau from Norfolk County.

I really do not know how to proceed among you people. I think some of you do not realize some of the habits handed down to Mr. Turner, of Maryland, from his forefathers. He is a dairyman; he has a family cow on one of his farms, and he is liable to take his milk pail and stool and go out in his pasture and milk that cow. That is a good thing to do in these times. Mr. Turner is quite a wonderful man. I was out there one day before he went to New Hampshire, and there he was sitting on a stool milking the cow. I enjoyed having him up in New England.

I think the Northeast region this year made a splendid showing at the National Convention. Maryland contributed materially to that.

I want to say here that I thank Mrs. Kern for her splendid contribution to the organization, especially at the National Convention. She represented your women and contributed materially, and focussed the attention of a great many organization leaders in the United States on the women's part in this organization; she made a great contribution in that field.

Now, with this goal which we have set for the coming year, we have declared to the world that the American Farm Bureau will have a million farm families in that organization, and we must meet that goal. The farming people of North America are looking to us to make that goal, and we must make it. We had a membership of 850,000 farm families last year, and each State must meet its quota in the coming year to bring that membership to one million.

Another obligation goes with that membership; particularly is that true in the Northeast which has one-third of the population of the country, but has only 10 percent of the farming section. Another obligation which we have is to our youth coming home. We have a great obligation to our youth after he leaves 4-H Club work until he goes on the farm. We must have a real program, so we can work him into that program so he will take his place in the work on the farm. We must train them to go along in the Farm Bureau, and take the place of the older members later.

I want to see that your program gets back on the schedule. I am pleased to be here. I will be around for a day or two, if you like to ask me any questions or visit with me, I would be very glad to see you.

MR. TURNER: It gives me particular pleasure to present the next man. He needs no introduction. He has been your President for the past two years, and he has industriously devoted himself to membership, to building up the biggest Farm Bureau membership we ever had in this State. Again I say it is a pleasure to introduce to you, R. C. F. Weagly, who everybody likes.

PRESIDENT'S ADDRESS

R. C. F. WEAGLY, President

I hope that Mr. Turner meant that last remark. I surely would appreciate it if it were true.

Now I wanted to give a preamble to my annual message, and I wanted to talk that to you, but my wife insisted that it must be written because she said I would get talking and take all morning, so she got up this morning and had that preamble typewritten and here it is:

Preamble

Since Christmas I have been thinking about writing my annual message and during that time certain things have happened which caused my thoughts to get rather critical, but, by the time I was ready to put my thoughts on paper, I began to think about the fine cooperation I have received during the year. So, what I have written is very different from what I thought I would write.

I wish to express my appreciation to Dr. Symons and all of the Extension folks who have cooperated so well; and to our past president, Mr. Turner, and T. Roy Brookes, Master of the Maryland State Grange.

The splendid assistance of Mrs. Kern and the Associated Women has been deeply appreciated.

The efficient work of Miss Dressel and Miss Myers in the State office has been very helpful.

I have enjoyed touring the State with our two fieldmen, Mr. Smith and Mr. Sutton, who have been exceedingly cooperative.

To all you good people out in the counties, who have done such a splendid job, I wish to express my gratitude.

Last but not least, I have appreciated the help and cooperation of our good secretary, Ed Wise. In my small vocabulary of the English language it is difficult to find words to express my feeling of appreciation. So, I shall just say that he is a mighty fine fellow to be associated with.

While we meet for the 29th annual convention of the Maryland Farm Bureau, most of the civilized world is still at war. It is my sincere hope that when we meet one year from now the allied nations will have been victorious in peace as well as in war.

We are now very enthusiastic about building a strong Farm Bureau through which farmers may have a part in establishing the peace. I hope that we will then be just as enthusiastic about sustaining a strong Farm Bureau so that our organization may have a part in maintaining peace and prosperity for all.

It has been demonstrated time after time that our nation cannot be prosperous if agriculture is held in a position of disadvantage. Economic balance, therefore, must be maintained; and it can be maintained if wages, industrial prices, farm prices, and the cost of services of all kinds be at levels permitting fair exchange of the goods and services created by the various groups of our society. If one of the groups takes more of the wealth than it creates, the entire free enterprise economy will break down.

On every front the world over, democracy is putting words into action. Our boys are not fighting to create a new world order, nor to impose their religion on the world; neither are they fighting to gain glory for themselves. They are fighting to preserve the kind of America in which they lived and worked before they went into the Service.

American freedom is the touchstone of the remarkable achievements of this nation. This American freedom of individuals and their enterprises is worth fighting to perpetuate.

While our civilization has its roots in the soil of the past, its branches reach to the stars of the future. Otherwise, it would lack the experience and motive necessary for noble achievement in the present.

This nation was established and built by farmers. Its basic unit has always been the farm family. From the very beginning, the wick of freedom's torch has been the American farm home.

Our country is great because of the ideals which the pioneers established for its homes, for its schools, for its churches, and for its democratic community life. It reaches up and out and forward.

The future of our country depends on our determination to stand by those ideals that have made us great.

Any national emergency, such as the war in which we are now engaged, tends to stop or at least hinder many of the usual peacetime activities. The one thought uppermost in the minds of all of us is the successful culmination of the war and the establishment of an enduring peace.

To this end we direct the major part of our energies, sometimes to the neglect of other essentials whose immediate needs are not so apparent.

One of those essentials which we dare not neglect is the service of educational agencies. Few benefits of education are immediate; the objectives are in the future and the process is long drawn-out, so there is a common and dangerous tendency during emergencies, such as this, to postpone education.

Farm people insist that education must go on and that every child must receive a minimum of elementary education which is more than a matter of personal advantage; it is a very necessary contribution to our national strength for the years ahead.

Invasion of war into thought of the present and into the outlook for the future contains potential dangers and will impose duties heretofore unknown. In many communities the temporary high wages and free spending have exceeded that of any previous generation of adolescent youth and are a factor which contains vast potential evil to our American way of life. Many young people in towns have refused to return to school. At the same time, countless numbers of rural youth are assuming responsibility on the farm in the production of food for our nation and our Allies. They are taking the place of older brothers who have gone into the armed forces. Yet, never before was it so essential to train strong, clean, healthy and clear-minded young people for life.

The loyalties and knowledge in which we are schooled will shape our way of life. For rearing a generation of free people in the democratic faith we must evolve an educational system, demanding integrity in all its relations, pledging freedom from narrow partisanship and freedom from control by private interests and groups, and keep it close to the enduring ideals and the changing problems of the American people.

The only way we can enrich rural living is by working together to improve our farm homes, our rural churches, our rural schools and our rural neighborhood.

Farm leaders through our organization are earnestly endeavoring to create an understanding of world citizenship among farm people. Farmers must continue their magnificent support to the fundamental institutions of the world.

Our national Farm Bureau President, Mr. Edward A. O'Neal, the greatest leader farmers have ever had, said in his annual address given in Chicago, three years ago: "Your Farm Bureau was founded to translate education into action, to bring to farmers the advantages and opportunities created by new methods and new discoveries. The Farm Bureau has associated and correlated its efforts with those of the Land-Grant Colleges and the Extension Service. We must maintain and strengthen this relationship. We must help them and they must help us to serve rural America even better than we have in the past."

Success in Farm Bureau depends upon the leadership of men and women out in the local communities. Therefore, a new emphasis has been placed on adult education through discussion groups which stimulate interest and create a better understanding among neighbors in the community. Here men, women and young people constitute an interdependent part, having a special function with respect to a dignified, well-rounded and cheerful meeting in each community.

Bitter experience has demonstrated that farmers must have a strong organization; that they must direct their own organization; and that they must work out its policies.

We of the Farm Bureau have sensed the debt we owe to the great men and women who, during the past, have laid the foundation on which a more permanent agriculture must be built. You and I have wondered how we can pay off the debt we owe. I can think of no finer way than to create in those who come after us a similar debt of gratitude.

Statisticians have figured that in this war it costs a million and a half dollars to kill one man. That is why we have what is called war prosperity, which is a sign of economic well-being in the same sense that a high temperature is a sign of good health.

When we get through with exploiting our resources and exercising our utmost ingenuity to kill Germans and Japs for a million and a half dollars apiece, we ought to have brains enough to know how to help men to live, and be able to show a profit on the operation.

If our post-war prosperity depended solely upon our ability to produce, we would have nothing to worry about. The amazing record of American production for war purposes leaves no room for doubt of our ability, as a nation, to raise on our farms and process in our factories an abundance for our peacetime needs.

But production is only half the answer. Production is effective only to the extent that it fulfills demand. Production without demand is sterile. To create and meet the demand, a system of distribution must be worked out. We as farmers are winning the war through production, and to win the peace as a nation it will be through distribution.

The only income that is actually high is one that is high when measured, not in dollars, but in the goods and services that income can buy.

The real test will come when the backlog of orders growing out of wartime deprivations has been filled, and the surplus savings are spent. That will be the time when the sources of economic power in the United States must function effectively and in harmony, if we are to prove the worth of our system of private enterprise.

Those sources of economic power are, basically, agriculture, industry and labor. The welfare of each depends upon the welfare of the other two. The prosperity of each stimulates the prosperity of the other two. Nowhere is the interdependence of the various members and groups of our modern social order more evident than in the relationship between these three greatest groups of all.

The prosperity of all other services is also dependent upon this inter-related prosperity of agriculture, industry and labor.

Consequently, the foundation of America's postwar economy will be secure to the extent that agriculture, industry and labor cooperate to their mutual advantage. There can be no tug-of-war between any two of them, each striving for an advantage at the expense of the other. In a tug-of-war, the strength on one side cancels an equal amount of strength on the other side. Teamwork is vitally necessary, for in a team, strength is added to strength and the pull is doubled.

To this end, there are many organized groups which can serve as unifying influences. Farm organizations and cooperatives, labor unions, trade and manufacturing associations will have to take the long view of what will serve the common interest, rather than the short view of an immediate selfish advantage.

Particularly does the lesson need to be learned that class legislation, obtained by a pressure group with a single eye to its own immediate advantage, is the most dangerous of all solutions to our economic problems.

Yet, if we who believe in the private enterprise system are unable to cooperate in planning for our common good, we cannot be too critical of Government if it undertakes to do our planning for us. If we cannot settle our disputes, we are not in a good position to say "hands off" to Government.

If we can all be guided by the long-term objectives we hold in common, we shall be on the road toward the kind of post-war world our soldiers and sailors hope for and certainly deserve.

One long-term objective which should have the concern of everyone is to rebuild the fertility of our soil. Much of the original fertility of America's soil has already been lost, and the remainder is being depleted at an alarming rate.

Farmers can no longer move from worn-out soil onto virgin soil, for our once vast areas of it are gone. There is nowhere left to go. Unlike

an obsolete manufacturing unit, farmers cannot "junk" a farm plant and start another. But, it is possible to rebuild the fertility and productivity of the soil. The reason more farmers have not done so is because high production costs have kept their usually small incomes too low. Some have actually sold a part of the fertility off the farm to make ends meet.

This practice must stop. We must begin now to rebuild the fertility of our soil which is a matter closely interwoven with that of adequate nutrition. These two factors are also essential requirements in the achievement of a durable peace.

Whatever the past has meant to us—its joys, its sorrows, its victories, its failures—let it be history.

Just what the New Year will mean to us depends largely on what we will do with it. Surely, the pessimist will find many things to kick about, but the optimist will find just as much ground for cheerfulness and will make 1945 worth knowing.

Let this year be to us a living issue. Work and cooperation point the way to future accomplishments. So, let *all* of us go to work now, with mutual understanding and sincerity, and make 1945 our BANNER YEAR!

MR. TURNER: I am sure you all realize that was a very masterly address that has just been presented by Mr. Weagly. Next on the program is a man just like everybody else, but he really can speak for the Maryland Farm Bureau. He has control of the field men, the girls in the office and everybody. He has helped in building up the largest Farm Bureau membership we ever had in this State. Mr. Wise is also the legislative watch dog over what they do down at Annapolis. I am sure everybody is ready and willing to go to Annapolis with him to help when he calls us. Mr. Wise.

SECRETARY'S ANNUAL REPORT

C. E. WISE, JR.

Our farmers, in 1944, have lived up to the splendid heritage created by their forefathers in the building of the Free State of Maryland over the past 300 years of war and peace. During the strenuous war year just passed, Maryland farmers produced more food than was asked by their country with less equipment, labor and material. There have been no strikes. They also found time to build Farm Bureau.

Our membership now totals 8,744—the largest ever for Maryland and represents an increase of 2,400 over 1943. This increase is nearly double the entire membership back in 1932. Today 23% of all Maryland farm families are Farm Bureau members. We have made a good start, but if we double our present total, we still have less than half of the

farmers enrolled. A 50 percent sign-up of farmers is a goal worth setting. It can be attained, as one of our counties, Kent, now has a 45% membership while Charles has a 40% membership enrollment.

I have discussed membership first, as it is the most important factor, the foundation of the organization's strength, program and accomplishments.

Every member added to our ever-growing number helps lay a better foundation for our program to improve the conditions in agriculture. Our state membership committee met last night and made plans to secure 10,000 members in 1945. These plans call for membership campaigns in all counties between now and April 15. The cooperation of all leaders and members in the counties to perfect and carry out these plans will insure a membership of 10,000 this year before the crop work is well started.

As we build our own organization, we must also work to secure continued unity among all farm groups so that agriculture will have all its strength working for our future program.

During the past year your state officers have continued the work with the State Farm War Finance Committee, the State War Board, the State Farm Labor Board, the Post-War Planning Committee, the state O.P.A. advisory committee, and other committees. The Farm Bureau and Extension Service took a leading part in the planning and conduct of the Conservation Forum attended by 1,000 persons April 12 in Baltimore. This meeting brought together people from the city and country interested in conservation and did much to create backing for the soil conservation program.

Eight from Maryland attended the Cooperative Centennial in Chicago October 10-14, 30 attended the Farm Bureau conference in New York August 22-24 and 65 attended the annual meeting of the American Farm Bureau in Chicago December 10-14. Here President Weagly served on the resolutions committee and Maryland was one of the 10 states that made the Million Membership Goal set by the national organization. Mrs. Weagly was elected president of the Associated Women of the American Farm Bureau and thus becomes a director on the A.F.B.F. Board.

The Farm Bureau Wool Pool handled 120,000 pounds of wool and will net the growers about 49c per pound on clear wool.

Local purchasing cooperatives have made remarkable gains. The volume of the Frederick Farmers Cooperative, 1944, totaled \$1,750,000. Thurmont's reached \$300,000, Union Bridge's was \$375,000, Washington County Farm Bureau's was \$325,000, Chewsville's exceeded \$500,000, Anne Arundel Farmers' Association topped \$500,000 and the Eastern Shore group bettered \$1,000,000 for a total of over \$5,000,000 by these independent cooperatives. The Westminster Egg Auction had a \$458,-

000 volume of business—a gain of \$150,000 for the year. These figures were more than equaled by the Southern States Cooperative's agencies in the state.

The Union Bridge Cooperative recently purchased the Smeltzer property at New Windsor for \$37,750. This was financed by the sale of stock to local farmers. The property includes a coal dump, a lumber business, feed plant and a grain storage equipped with a washer and drier capable of taking care of the needs of nearby co-ops. This latter service will be invaluable to the producers in wet seasons. The Howard County Farm Bureau organized, financed and built a \$30,000 cooperative food locker plant that opened October 16. Complete service from slaughtering to storage is offered the members. Cooperative poultry dressing plants at Salisbury and Snow Hill are under way. The Southern States Cooperative is backing the Salisbury plant, which should be open in early spring. These plants, according to Farm Credit officials will save the Eastern Shore broiler producers better than \$1,000,000 a year. The Allegany County Farm Bureau plans a livestock auction. The produce auction block at Salisbury has made much progress in 1944. Such co-op. development is significant when you consider the fact that 25 years ago farmers had virtually no cooperatives to patronize.

We in the state office do not claim credit for this progress by the county groups on a self-help program. Our fieldmen Wilbert Smith and Martin Sutton have assisted this activity in their territories. Their hard work coupled with the cooperation of President Weagly, Mrs. Kern, Miss Dressel, Miss Myers provides the teamwork so necessary to getting the Farm Bureau job done. Dr. Symons and his entire staff have cooperated in every way and deserve much credit for their help in our program.

Our main problems in 1944 have been labor, supplies, machinery and price ceiling effects. These will continue to be problems in 1945, with farm labor more critical than ever while the German war lasts. P. C. Turner, chairman of the State Farm Labor Committee has helped Maryland farmers more than they will ever realize. He has worked constantly to keep labor on the farm and to secure more from every source possible. The Extension Service has handled the farm labor program most efficiently and we commend them for a job well done. We must continue to support this program.

The recent selective service order on the draft of farm youth apparently nullified the Tydings Amendment but we are advised that the final decision is still with the local draft Boards. Farmers have demonstrated their patriotism time and again. They have increased production with less labor and less machinery. They have worked time and a half for half pay and feel that the manpower shortage is to some extent an artificial one. A longer work week for labor in industry

is essential. Our enemies, Germany and Japan have long since been on 60 hour and longer weeks. We cannot win the war on a 40-hour week. Industry and labor could profit by the example set by the farmers.

Farm machinery production lagged in 1944 and is behind schedule in 1945. Some further slowdown is expected due to the recent reverses in Europe and the need for steel in guns and tanks. Plenty of spare parts and a better distribution of them is promised in 1945. Farmers face another year of getting by with old equipment. The 92 repair shops conducted by the State Board of Education under the direction of Mr. Ward have been most helpful and will be welcomed again this year.

Dr. DeVault has predicted that transportation will be the biggest 1945 Maryland farm problem. I mentioned this in my last year's report and the situation is much more serious now. It is suggested that farmers plan ahead to make efficient use of trucks delivering supplies, keep their own trucks in good repair, and maintain their farm lanes in usable condition. For this reason it is well to keep a supply of feeds, gasoline, and other essentials, on hand well in advance of needs.

Committee meetings and conferences have been held on marketing problems caused by price ceilings. Early in the year it was the egg glut, the tobacco ceiling price; in the summer it was fresh vegetables and broilers; later the turkey freeze, and now the broiler freeze, and the suggested ceilings on steers of various grades. In each case the growers concerned have met with OPA and WFA, presented their problem, and made constructive suggestions. Some of these have been followed and have proven sound; others have been disregarded. These meetings have developed a tendency for government officials to cooperate more with the producers. For instance, the tobacco ceiling was changed and ceilings have been removed on certain vegetables. Many in the OPA agree that ceilings on fresh fruit and vegetables are most difficult, if not unworkable. We think they are unworkable and should be discontinued except when shortages are caused by drought or frost.

Farmers have had the same difficulties with rationing and shortages experienced by all citizens. The recent cancellation of ration stamps, including sugar stamps, is an example. This we take as good sports but regret that this action, like others, penalizes most those persons who are cooperating with the government. Now that the national election is passed, we hope rationing will be used solely for rationing purposes.

The public deserves full information on these moves and would be completely satisfied in the knowledge that they were necessary. This also applies to reports on the progress of the war which ought to include the truth, both bad news and good news. My own opinion is that the American people have been treated like children with honey coated news to keep them satisfied. If we are intelligent enough to produce an abundance of food for war, we are intelligent enough to take the bad news with the good. The raw, unflavored news should be given us; then we will understand the manpower problems and can help solve them.

Most of our current problems will be eased when the war ends, but our old problems will arise magnified by the repercussions of the war period. Forward planning is required to meet the future needs of agriculture. The following program was sent to the 100 planning groups and has been endorsed by those replying. We should have 1,000 of these groups as they are the means of building a program from the farm family.

The program for organized agriculture in Maryland starts with the individual farm family and includes community, county, state and national projects and policies. Among these are the general goals of information through increased research and education, the sponsorship of present cooperatives and the development of needed services, the strengthening of cooperative finance, a rural health program, continuation of soil conservation service and drainage and helpful legislation state and national. We need more information through the findings of research and should work for increased state and national funds to continue present studies and start others. This is the basis of education. We must get more funds for the Extension Service to bring the developments in farm practices to farmers. Further suggestions are that studies in crop and livestock production, disease and parasite control, and marketing, be continued. Services in soil conservation, drainage, agricultural engineering, and the science of farm management must be increased. *Efficiency of production should be the watchword of all.*

Research and education is aimed to help the individual farm operator in the conduct of the farm business. Much progress has been made and more lies ahead in the use of farm machinery in production and preparation of products for market. Increased agricultural engineering advice and services are needed for the proper guidance of our farmers. Efficient production methods will be necessary to operate our farms at a profit in the years ahead. The science of farm management tells how much and what to grow, where the profits and losses are. Farm management services should be increased to provide this information and assist our farmers in keeping proper records, so necessary these days of income taxes. Marketing and distribution of farm products to consumers need special emphasis. Less has been accomplished in this than in production although it is of equal or greater importance. While many of the faults and barriers to efficient distribution are national, we must concentrate on marketing improvement in the state and work with national groups to correct basic faults.

Cooperatives are the farmers' strongest asset in the economic battle. Results obtained through their business activity are definite and permanent. As experience and capital are built up, the benefits from these organizations will increase. Cooperative development should be stressed along the following outline: We should back and build the present purchasing cooperatives and assist in expanding their services. We must back and build present dairy marketing cooperatives; back other market-

ing cooperatives like the Farm Bureau Wool Pool, the Tobacco Growers Association; promote and sponsor needed marketing services for grain, vegetables, fruit, livestock, eggs, poultry (dressing plants), or other commodities where practical. We should promote the extension of rural electric cooperatives; encourage and sponsor in communities such special services as frozen food locker plants, special service cooperatives, seed cleaners and others that may be needed. All farm organizations must stand together and vigorously oppose the National Tax Equality League in its attempt to destroy the cooperative movement, as evidenced by the move to repeal the co-ops' exemption from the Federal Income Tax.

The farm credit system was developed to fill the needs of farmers and their organizations in the strenuous times after World War I. It has done well in providing credit for production, for land purchase, and cooperative development. These services will be needed in the aftermath of World War II and must be guarded against the attacks of groups who contend they are no longer necessary. Farm organizations and their members should utilize the services of Farm Credit and participate in their management. Farmer support is necessary to insure the continuance of these services on a cooperative basis so that farmers will have credit when it is needed. Careful study should be given to the possibility of consolidating all governmental agencies furnishing credit to farmers.

A unified legislative program that will utilize the strength we have is essential to maintain the gains made and to secure additional ones. The adoption of the Grange-Farm Bureau tax program after years of effort has placed Maryland on a sound financial basis. A strong stand must be taken for more funds for the agricultural programs of the University of Maryland, for the elimination of the state real estate levy. We should, therefore, support the move to restore the state income tax to the 2% rate. The Baltimore wholesale fruit and vegetable market facilities are inadequate and are now being studied by a commission. We should endorse the plan to improve these facilities by enlarging the farmers' market in the Camden area and urge that all groups back this project. Mastitis of dairy cows causes more production loss than any animal disease. An intensive program to eliminate mastitis has been recommended as the No. 1 Maryland livestock conservation measure. This is a worthy move and we should support the legislation and the funds necessary to carry out this campaign. The committee on medical care of the state planning commission has recommended a comprehensive medical care program for Maryland. It provides for a division in the State Department of Health to carry out the program in the counties. It is a start toward better medical care for our rural people through the public health service in cooperation with the Department of Public Welfare, based on the private practitioner. This program has the endorsement of the Maryland Medical Associations and needs the support of farm organizations.

Soil Conservation as carried on through the 17 soil conservation districts of Maryland is one of the most important projects to insure permanent, efficient crop production. Farm Bureau supported the enabling legislation and should work for the appropriations needed to conduct this program more vigorously.

Farm to market roads and farm service roads have received too little consideration in former road building programs. The Maryland plan for \$60,000,000 post-war program is now in preparation and state officials should be urged to allocate ample funds for Farm to Market Roads to get our farmers out of the mud.

The Maryland elementary school system does not provide our farm boys and girls with adequate educational opportunities. Every Maryland farm child should have 12 years of elementary schooling under qualified teachers. The Farm Bureau should back the program that will accomplish this.

Protection of farm products against strike damage, improved egg marketing, control of Bang's disease, European Corn Borer, Japanese beetle control, and artificial breeding of dairy cattle, are among the many projects that will need farm organization support in the future.

National policies determine the economy of the country and how the various units function. Farm organizations will have a voice in making these policies; state and county members have a duty to inform themselves on the issues and their solution. The foremost issue is that of *world peace maintenance*. Under a policy of isolation the United States has been forced into two World Wars, and can no longer dodge the role of aggressive world leadership for the perpetuation of peace. The questions are how far to go in cooperating with other nations to insure peace, whether to maintain our armed forces through compulsory training or voluntary methods, and what changes are necessary to provide adequate development and unification of our national defense. The disposal of surplus war materials presents an enormous task that demands planning and impartial administration. Restrictions under OPA—ODT, WMC, NLB and others have been necessary during the year to ration goods and control prices. They interfere with the natural flow of goods, cause loss to farmers, irritation and waste of time to all. These controls give the Federal government too much power over individuals and may be misused to further social reform. They should be continued only where necessary to prevent serious inflation and must be discontinued as soon as the war is over and the nation's facilities converted to civilian production. The question of price control will come up when the extension of this law is before Congress in the spring.

A stabilized price level is badly needed to prevent the ruinous price fluctuations witnessed over the past 100 years. Agricultural prices fluctuate more violently than the general price level. How to secure a stabilized price level is a very complicated and controversial subject even

among monetary authorities. The recommendation has been made that Congress establish a bi-partisan national monetary authority charged with the stabilization of such price levels as selected by Congress.

Federal taxes and expenses have been sharply increased to meet the war costs. Taxes are burdensome and will tend to restrict business development in the post-war period. I feel that it will be better to have taxes too low than too high in the reconstruction period. Our national organization should be urged to study the national fiscal plan and the tax structure. Economy in government, and a tax program that will encourage private enterprise, are essential. Labor trade barriers restrict the free flow of goods and services. The Department of Justice should have authority to investigate the restrictive practices of organized labor and should make public such malpractices as restricting the output per worker. The farmer should be allowed to conduct his own business of producing and marketing his products without interference from organized labor. Such practices as requiring farmers to hire special union drivers to move their trucks into markets or preventing farmers from unloading their products should be prohibited.

The proposal to include farmers and farm laborers in the Social Security program of old age insurance presents a question for farm organizations and their members. At present, farm workers (domestic workers and self employed) are exempt through the efforts of farm organizations. Workers returning to agriculture from war plants where they have learned of the benefits and made payments toward old age insurance, will want to continue this program. There will be pressure to include farmers and farm labor. This question deserves careful consideration by farmers and farm leaders so that they may make the decision best for agriculture in future years.

The Agricultural Adjustment program should be used only when needed in the war effort and as a safeguard against low prices in the post-war period. The feature of research for new uses of farm products should be continued and stressed. The provisions for crop adjustment, crop loans, crop insurance and an improved plan for surplus disposal may be necessary in the future to give farmers an opportunity to stabilize their prices through cooperative effort with the government. The administration of the plan must be broken down into state units to give it the needed flexibility. Authority to make decisions should be in the state. The director of Extension in each state should make the nominations of members of the state board to be selected by the national board. County units should operate out of the county agent's office. This would avoid duplication of effort, eliminate waste, and build a unified, efficient program. State boards should have the entire responsibility of carrying on the work now carried on by the AAA committees, the Soil Conservation Service, crop insurance and the farm and home activities of the Farm Security Administration. Similar arrangements should be made

in the counties. This plan will save money, time and prevent waste. It unifies the farm program, decentralizes authority and emphasizes democracy.

The recent report of the land-grant college committee, to me, contains a most significant, and sound philosophy on economic problems and their solution. It condemns restrictions of all kinds now practiced by labor, industry and agriculture and urges all groups to forget selfishness and adopt an economy of abundance. Agriculture has already challenged the other groups to do this. A study of this report is recommended.

The deplorable trend to centralize all power in Washington was stimulated by the war. A continuance of it will undermine democracy and lead to dictatorship. The only way to reverse this trend is to increase the ability of local governments to assume greater responsibility in the solution of local problems. Farmers can help by encouraging better local government. They should insist that Federal programs be decentralized. Local people should be encouraged to take part in the planning and operation of these programs. Democracy's strength is in the composite judgment of the people on the problems as they arise. We must develop democracy by practicing its principles as we are going to need its full strength in the rebuilding of our national economy to provide equal opportunity to all.

MR. TURNER: Thank you, Mr. Wise. That was a wonderful address, a wonderful program you have outlined. If we carry out everything you suggest, we will get along all right.

The next speaker that I have the honor to present to you is a man of dynamic personality, a man who is always willing and ready to go any distance to speak to a farm gathering and tell them just what they should do. He is always our good friend, Dr. Symons.

OUR 1945 AND POST-WAR AGRICULTURAL PROGRAM

By DR. T. B. SYMONS, Dean and Director of Extension

It is a pleasure to bring greetings of the Extension Service and University to this fine annual meeting of the State Farm Bureau. Congratulations on the results of the organization campaign for members. May we attain greater heights. Much has happened during the strenuous year of 1944, and we hope much more will happen in 1945. We are still meeting under the shadow of war and that shadow has become much darker during the past three weeks. Our fighting forces are experiencing unexpected opposition in the counter-offensive in the European theater and conquering as they move in the Pacific area. Our faith and hope were unshaken and our excessive optimistic mood was not justified, but we must beware of the other extreme.

In my opinion, 1945 will be more critical for the country than 1944 in almost every aspect of the war. Above all we must continue our all-out

production program. Recent events may make some adjustments necessary, but for all practical purposes Maryland farmers must duplicate in 1945 their amazing record production of 1944. The tightening of rationing of practically all foods, the meat picture and other factors affecting our food supply indicate a greater need than heretofore.

Aside from the needs of our fighting forces and civilian population, national authorities feel that Lend-Lease will need more to meet the distress in Europe this winter. Recent dispatches indicate that the food reserve in many countries is near exhaustion. This means a greater toll upon our food supplies. To visualize this demand, deliveries of food and other agricultural products for shipment to the Allies under Lend-Lease, according to the War Food Administration announcement during the month of November, totalled 467,500,000 pounds, made up as follows—dairy and poultry products, 114,027,311 pounds; meats, 35,101,971 pounds; fats and oils, 41,893,414; fruit and vegetable products, 39,038,547; grain and cereal products, 43,660,176; sugar products, 18,307,225 and special commodities, 24,052,615; tobacco products, 1,088,858; cotton and fiber products, 50,364,700. In addition, 53,310,000 pounds were secured for the Caribbean program, 17,393,851 pounds were purchased for Hawaii, and 129,978,800 pounds were purchased by the War Food Administration for our armed forces and other agencies. This gives us some idea of the enormity of these demands.

The picture is constantly changing, but all agree that we must produce to the utmost in 1945. An educational program will be carried on by the Extension Service in cooperation with all Federal and State agencies and farm organizations to give all of our farmers the facts in the situation. We know they will respond as they have before. Too much credit cannot be given to our farmers and homemakers for the manner in which they have met and exceeded the nation's production requests. Even with the shortage of labor, machinery and other setbacks, our farmers and their wives and families have produced more and more. Let us here express our ever increasing admiration for the men and women of the farm who wear no uniform, the Ambassadors without port-folio—the unsung heroes of this and every crisis. We should also give credit to all agencies in the cities and counties for the splendid victory garden production. The "Food Fights for Freedom" Committee of the State Defense Council greatly assisted in the splendid results obtained. We hope the experience of all victory gardeners will be such that they will raise gardens long after V-day.

I have passed out a sheet showing the goals and you will observe the minor changes in acreage of crops, livestock and poultry. The Extension Service, in cooperation with other agencies of the War Food Administration, plans holding regional meetings where all facts concerning production, need, support prices, etc., will be given.

Farm Labor

It is gratifying that Congressional legislation has been passed authorizing a continuation of the farm labor program in 1945, similar to 1944. The Extension Service has done its best under trying circumstances to assist our farmers in this critical field. My belief is that demands, if possible, will be more acute the coming year than heretofore. It is evident that policies with respect to deferment for agricultural work will be more stringent and the problem of maintaining essential year-round farm labor will be even more difficult. Great credit is due Paul Nystrom, his assistants, the County Agents and farm leaders in all sections of the state for doing a splendid job. We likewise express appreciation to Mr. Phil Turner, Dr. DeVault and members of the State Labor Advisory Committee, including President Weagly and Secretary Wise for able assistance in this important aspect of the food production program.

Post-War Agricultural Program

No one knows what the future holds for us, yet it seems wise to give thought even at this time to our post-war agricultural program. A great deal depends upon the length of the war and whether it ends suddenly or gradually. When V-Day arrives and our returning heroes reach home, including many who left the farms, when new and better farm machinery is again available, when farm labor will be more accessible, when fertilizer and other needs of the farm can be secured, when the larger needs of the devastated areas are satisfied, the production of American farms is likely to be much greater than consumers demand. For these reasons farmers are thinking about the post-war period. They are reducing debts, postponing expansion plans, improving their efficiency and hoping plans can be devised to keep industry in high gear so that we shall not be burdened with surpluses. No one has the answer to the many post-war problems. But the leaders of agriculture in Maryland are looking ahead.

A year or more ago, November 30, 1943, a state-wide Agricultural Committee was formed and authorized the appointment of 18 sub-committees on different phases of agriculture and rural life. These committees met and submitted reports which were distributed in every county of the state for discussion of leaders and farm organization groups. The State Committee held its meeting in this city on October 20 and adopted all sub-committee reports, with such amendments as seemed wise. This Post-War Report is now being printed for distribution. I cannot discuss its many features in this talk.

Some of the major objectives of our agricultural program in the Post-War will be:

1. To provide consumers with foods and fibers at reasonable prices.
2. To insure income for farmers that will provide a standard of living comparable to that of other large productive groups.

3. To provide freedom of opportunity, ever dear to the peoples of rural Maryland. Our Committee opposes the regimentation of agriculture in time of peace.
4. To insure that degree of security which will make for stability of family and community life.
5. A comprehensive plan and intensive educational work to promote good nutrition among all our people. Development of an adequate health program, especially in our rural areas.
6. A policy of abundant production, rather than scarcity, with the use of reasonable price supports only when necessary as an emergency measure.
7. Greater economy and efficiency in marketing and distribution of farm products and in the commodities farmers buy through improved methods and facilities.
8. Development of our soil conservation program, together with an effective approach to the conservation of all natural resources of the state.
9. Better housing for rural people. The committee recommends a repair and building program in the post-war period with adequate facilities for light and water to enable rural people to enjoy a higher standard of living.
10. A progressive policy in education in our rural elementary and high schools, and adequate support for our institutions of higher education, especially our State University.

We are deeply interested in the report of the Committee on Post-War Agricultural Policy of the Association of Land Grant Colleges and Universities and recommend that all of our people, especially members of the Farm Bureau, study it. The Extension Service is purchasing a number of copies of this report for distribution.

As I have previously indicated, our first job is to help win this war. Post-war plans are now in the lap of the Gods.

MR. TURNER: I think everybody will agree in saying "What a man!" I failed to say in presenting Dr. Symons that in my mind he has built over the years the greatest extension force of any State in the Union. Let's give the Extension Service a hand!

The last speaker is a man whom many of you know, but I am afraid not enough of the farmers know the importance of his job,—that is Research. He has over the years been performing a very fine work. As Mr. Wise mentioned this morning, everything connected with the Experiment Station is vital to us. Dr. Kemp is Acting Director of the Experiment Station.

SCIENCE, WAR, AND POST-WAR

DR. W. B. KEMP, Acting Director, Maryland Experiment Station

There is one thought that I want to leave with you at this time. As

background for this thought, there are two points that should be developed. First, I want to point out the growing tendency on the part of industry to supply human needs once supplied by agriculture. A quarter century ago, horses were the greatest consumers of agricultural produce aside from man. At that time there were 27 million horses on farms alone in the United States. It is difficult to get specific information on the number in cities, but we do know something of the numbers which were needed in the dray business, in the livery stables, and in distributing milk and other supplies from house to house. At that same time, the total number of dairy cattle on farms was only 22 million. Today the horse population of our cities has practically disappeared, and the numbers on farms have been reduced to approximately 13 million. Farmers sold to cities the horses necessary for transportation and the feed which these horses consumed. Today a large item of farm expense is the cost of automotive equipment, the tires, the gasoline, and the oil necessary to run it.

Formerly, fiber constituted the most important agricultural commodity aside from food. In 1911, the first rayon mill in the United States was established. In 1943, the rayon industry of the United States produced 11.4 as much fiber as was produced in our cotton crop. Rayon requires for its manufacture cotton linters and wood pulp. Nylon requires neither of these, and with the close of the war a fully developed nylon industry will be ready to turn out that product in competition with agricultural fiber.

The only sources of commercial nitrogen a few years ago were the guano deposits on various tropical islands and the nitrate deposits of Chile. Last year in our commercial fertilizers alone we used more than 500,000 tons of nitrogen obtained either in synthetic compounds or as a by-product from the coke industry. Formerly, agriculture had to depend largely upon legumes to provide nitrogen. At least 10 million acres of legumes would be required to produce this amount of nitrogen. However, there is another development more startling than the use of synthetic nitrogen compounds in our commercial fertilizers. During the war period, for the first time, urea, a synthetic nitrogen compound, has been used as a substitute for protein in the feed for farm animals. I believe this is the first case where a synthetic industrial product has been used on farms to feed livestock.

I shall only mention the chemical industry in synthetic dyes and drugs in the replacement of corresponding products of agricultural origin.

Only a few years ago, lard was the principal fat used in cooking in our homes. To produce this lard, farm crops were fed to hogs and the lard was obtained from the hogs. Today, Crisco, or corresponding products, is manufactured directly from vegetable oils. A few years ago, butter was the chief corresponding material used on our tables. Farm crops were grown and fed to dairy cattle and the butter was manufac-

tured from the product of these cattle. Today oleo and corresponding products are made in large quantities directly from the oils of vegetable origin.

I have used enough illustrations to stress the fact that more and more industry is supplying human needs once supplied by agriculture. This tendency in no small measure is responsible for the gradual reduction in the proportion of our population which is engaged in agriculture, a proportion which in 1943 was less than 19%. However, the proportion is even lower when only workers are concerned because the typical farm family is larger than the typical urban family. Records of the distribution of industrial workers in the United States show that in 1870 more than 47% were farmers and farm laborers. In 1940, this proportion had dropped to little more than 17%, a proportion approximately one-third that of the earlier period. I do not decry this tendency in our industrial development. I do want to point out the fact that with the reduced proportion of our people engaged in agriculture, there is a reduced sympathy for and appreciation of agricultural problems on the part of our urban population. When nearly half of our people were engaged in agriculture, many of those living in cities had fathers and brothers who were farming. With the reduced proportion in this occupation today a much smaller percentage of the city inhabitants have any contact whatever with farm problems.

I have in my hand a little booklet entitled "Farmers in the War," prepared by the Office of Prince Administration. I assume that the figures presented in this booklet are correct, but many of the statements which it contains would not have been made had those preparing it been acquainted with the problems of agriculture. I see on page 5 that the price increase on things farmers sell rose 102% during this present war period, while the price increase on things farmers buy rose only 31%. In another place, I see that farm prices have increased five times industrial commodity prices during the war period to date. I see that in World War I the price increase in things farmers sell was 19% greater than the price increase in things farmers buy, while in World War II the price increase in things farmers sell was 71% greater than the price increase in things farmers buy.

Now let us look at some of the details out of which these generalizations have been drawn. I cite extreme cases to illustrate the point. During World War I grapefruit rose in price from \$1.70 to \$2.70, an increase of 59%, while in World War II they rose from 32c to \$1.46, an increase of 356%, but you will note that the \$1.46, representing an inflated price in World War II, is not as great as the \$1.70 at which price increase began in World War I. Similarly, with soybeans, I see that in World War I prices rose from \$1.80 to \$4.05, while in World War II they rose from 64c to \$1.90. Other illustrations might be chosen, but instead of choosing details, I have attempted to summarize the figures. For this summary, I have eliminated all products such as cot-

tonseed meal, which represent materials of agricultural origin which farmers buy. There remain 17 articles which farmers sell. Among these 17, only 3 have sold as high in this war as they sold in the last war. Of the 10 articles which remain that farmers buy, only 4 sell as low in this war as they sold in the last war. The percentage changes referred to in the booklet are greater during the present war than the last war only because price increase of things which farmers sell began at such a low level. It is as though I were to argue that because the distance from the floor to the top of this stand where I am speaking is greater than the distance from the top of the stand to the microphone, therefore, the stand is higher than the microphone. Conclusions of this kind could not be drawn by one well acquainted with agriculture and its problems. With the proportion of farmers one-third of that which prevailed at an earlier time, each farmer must speak with three times his former voice if he is to be heard, and all must speak in unison if they are to be understood. One of the functions of the national farm organizations is to provide a sounding board that will give volume to the voice of agriculture. Another function is to provide the unity that will give understanding to those voices.

Each new labor-saving machine which is developed gives added advantage to the type of agriculture in which it can be used, to the land level enough for its most economical use, and to the farming operations large enough to justify its purchase. Where, then, does the modern development in agricultural machinery leave the Eastern family farm in competition with farms of the Middle West? With each improvement in the processing of agricultural commodities and each improvement in transportation facilities, western agriculture is moved closer to eastern markets. The barrier of distance is lowered. There is much agitation today for the removal of all other barriers to a free interchange of goods between areas of the country. If eastern agriculture is to have the consideration which is due it in the common voice provided by the national farm organizations, it must have full membership and effective influence in those farm organizations.

I began this talk by stressing the rate at which industry is replacing agriculture in the supplying of human needs and the rate at which modern industrial advances move western agriculture closer to eastern markets. I close it by stressing the need for an increased voice by agriculture, if it is to be heard, and unity in expression if it is to be understood. I have stressed particularly the need for full membership and influence by eastern agriculture in the common voice which is provided by national farm organizations. A united and cooperative attack upon farm problems is necessary by the national farm organizations, the Land-Grant Colleges, and all other agencies interested in agricultural welfare, if the interests of agriculture are to be safeguarded. It is my conviction that with united effort, we are equal to the task.

MR. TURNER: If you ladies and gentlemen will bear with me, I would like at this time to express my appreciation to the members of the Farm

Bureau in the Counties for the help they have given to the local Draft Boards. As a result of the setbacks on the Western front, Washington has changed its rulings; they have decided that Germany, whom we all thought was down and out, is very much alive, and effective steps will have to be taken for a very active offense, needing more men. I want to assure you that the Tydings amendment is still to be respected, we have told the Selective Service that. They are, however, going to lower the physical standards, and that will mean that a lot of men formerly 4-F will be taken, they will not ask for such perfect specimens; some of them will be put in 2-C. They further tell me that every man put in 2-C class on your farm will have to stay there. That is the best I can tell you. Our State Selective Service does not expect to get a great many men from the farms, as the Tydings amendment is still effective. I hope the draft board will recognize that these men are essential to the farms.

DR. SYMONS: Mr. Chairman, I neglected to say anything about the farm labor program. We are ready, of course to go by directions from Washington. I hope you will make your request known to our Draft Boards and Service as early as possible. We are proud of Paul Nystrom and all of the associates in trying to serve you. Mr. Turner, Dr. DeVault, Mr. Weagly and Mr. Wise have all been doing wonderful work in this farm labor draft matter. Miss Emerson has done a very fine job with the women. We want to try to meet the requirements during the coming year, no matter how hard they seem.

MR. WISE: I want to second what Dr. Symons has said. Day in and day out these men have been working on these farm problems, especially Mr. Turner. I wish you would give him a rising vote of thanks for what he has done for Maryland.

Announcements, and recess. 12:00 Noon.

AFTERNOON SESSION

MR. WEAGLY: Will the afternoon session please come to order? I want to present a man whom you all know, a man outstanding in the field of agriculture in our State, Mr. H. H. Nuttle, to be Chairman for this session.

MR. NUTTLE: I do not know why they call on all the bald-headed men this afternoon, but I am now going to call on Wilson Heaps, Chairman of the Credentials Committee, for his report.

MR. HEAPS: Read the following report:

REPORT OF CREDENTIALS COMMITTEE

County	Paid up Members	Number of Directors	Number of Delegates
Allegany	204	1	4
Anne Arundel	347	1	7
Baltimore	693	1	14
Calvert	217	1	4
Caroline	437	1	9
Carroll	665	1	13
Cecil	159	1	3
Charles	375	1	7
Dorchester	208	1	4
Frederick	926	1	19
Garrett	198	1	4
Harford	644	1	13
Howard	284	1	6
Kent	355	1	7
Montgomery	446	1	9
Pr. George's	294	1	6
Queen Anne's	319	1	6
St. Mary's	270	1	5
Somerset	251	1	5
Talbot	230	1	5
Washington	506	1	10
Wicomico	515	1	10
Worcester	201	1	4
	8,744		
Associated Women		2	6
Md. Stockmen's Assn.		1	1
Md. State Horticulture Society		1	1
Md. State Poultry Council		1	1
Md. Cooperative Milk Producers' Assn., Inc.		1	3
Md. Tobacco Growers' Assn.		1	3
Hillsboro Queen Anne Cooperative		1	1
Md. Vegetable Growers' Assn.		1	1
Md. State Beekeepers' Assn.		1	1
Md. Crop Improvement Assn.		1	1
Md. State Horse Breeders' Assn.		1	1
Md. Nurserymen's Assn.		1	1

MR. NUTTLE: What will you do with this report?

Mr. Turner moved its acceptance, the motion was seconded and carried.

MR. NUTTLE: Now we will have the F. F. A. awards.

FUTURE FARMERS OF AMERICA AWARDS

Dr. H. F. Cotterman, assistant dean of agriculture at the University of Maryland and state vocational agriculture supervisor, presented the following persons to President R. C. F. Weagly of the Maryland Farm Bureau who awarded war stamps for achievements in the various projects in *Future Farmers of America* activities:

Baby beef: John Murray, Princess Anne, first; William Dorset, Poolesville, second; Thomas Young, Princess Anne, third.

Corn: Robert E. Simpson, Glasva, first; James Rollins, Hughesville, second; Fred Keister, Oldtown, third.

Dairy: Paul E. Lutz, Paul Coblentz, and Richard R. Halter, all of Middletown, first to third, respectively. This group received \$25 in additional awards from the Interstate Milk Producers' Association.

Potatoes: Fred Harvey, Oakland, first.

Poultry: Edgar E. DeLauter, Thurmont, first; Thomas Young, Princess Anne, second; Allen Nicodemus, Boonesville, third.

Swine: Leroy Johnson, Princess Anne, first; William C. Meyers, Hagerstown, second; and Harold Remsburg, Boonesville, third.

Tobacco: Joseph Lee Johnson, Glasva, first; John F. Hardesty, Jr., and James Thompson, Jr., both of Hughesville, second and third, respectively.

Tomatoes: Victor L. Schmick, Preston, first; Billy Rieck, Preston, second; and Charles Morris, Sandy Springs, third.

Miscellaneous crops: Charles Herbert, Jr., Hughesville, first; Earl Sterner and Kenneth Frock, both of the Charles Carroll school, second and third, respectively.

Miscellaneous livestock: Charles A. Morris, Sandy Springs, first; Robert Stuffle, Charles Carroll school, second.

Miscellaneous truck crops: Myron Draper, Middletown, first; Joseph Lee Jenkins, Glasva, second; Perry Shyrock, Flintstone, third.

Diversified farming: James Rollins, Hughesville, first; Charles Morris, Sandy Springs, second; David Patrick, Lisbon, third.

Dr. Cotterman announced that the total labor income on the winners' projects amounted to \$12,620.57, according to the records kept by the F.F.A. boys.

MR. WEAGLY: Now, to you boys, I want to say that I congratulate you as a group, and make a wish that at the time you boys get to be 18 years old the countries of the world may be peaceful and that you will never have to take up arms to protect this country.

MR. NUTTLE: We hear quite a lot about the most valuable crop produced on the farms. The poultry people think theirs is the most valuable, the dairy people think theirs is the most valuable, but I will tell you that I think the most valuable crop we have today is the crop you just saw lined up here. I hope there is some way by which we can persuade these boys between now and when they get to be 21 to take the place of the old fellows on the farms.

Now, before we proceed with our printed program, I want to say that Maryland has been signally honored this past December by the election of a Maryland woman as the head of the Associated Women of the American Farm Bureau. She is the only woman who sits on the Board,—a charming lady and a brainy one. She uses her head for something besides her hat. I am delighted with this honor that has come to Maryland. I think we should give her three or four or five minutes to have a chance to say what she wants to and give you a chance to look at her, Mrs. Weagly.

MRS. WEAGLY: Thank you, Mr. Chairman, for those kind words. I did not know I would be expected to make any remarks, or would have the privilege of doing so, but I am afraid to say I am nervous, because that reminds me of a story of a friend who said to a husband, "Your wife seems to be terribly nervous." The husband said, "Yes, but tell me what I can do to cure her." "Well, you might tell her nervousness is the result of advancing age!" So, you see, I dare not say I am nervous.

I assure you that it is a disappointment to all of us, as I am sure it is to you, that Mrs. Sewall cannot be with us today, as her duties called her elsewhere.

It is a privilege for me to bring greeting from the Associated Women of America, and to speak a word of praise and encouragement to you, and praise especially for the magnificent achievement you made in 1944. I wish to say that it is to such groups that we in the National will look for acquiring and maintaining membership, if we want to reach our goal this year.

It is very gratifying in Maryland, as in other States, that the Associated Women have rendered a great service, great assistance to the Farm Bureau in increasing the membership. I know Mrs. Kern is very proud of the Associated Women and of the work you have been doing, and of course we, the Associated Women, are very proud of Mrs. Kern and her splendid achievement. We have heard a great deal of the "man of the hour" but we consider Mrs. Kern the "lady of the moment." She reminds me of two maiden ladies who were discussing the subject of matrimony. One asked the other, "If you were selecting the man, would you prefer intelligence, that he should be well off, or appearance?" The other said very promptly "Appearance,—and the sooner the better."

You Associated Women in Maryland remind me of two women who were talking about a third, and one said, "Well, the lady has a very mag-

netic personality," and the other said, "She should have, everything she has is charged!" I know the farm women in Maryland do not have everything charged, but I do think each of the women has magnetism, because I have felt your magnetism for a long while. As Vice-President it was my privilege to meet many fine people, and make many good friends. With all due respect to Mr. Yost, I must confess when I was up in the New England States I found myself somewhat in a quandary, somewhat like the school boy when asked, "How to acquire a good posture?" he said "Just take the cows off of it and give it a little chance to grow."

I shall repeat what I said to the women yesterday,—All farm people must stand up for their profession. We must stand up for agriculture; stand up, not merely to be counted, but stand up to be heard. It is our business to help in building a better America and a better world.

It is our privilege and our duty to vigorously present the farmer's position as related to other interests.

We must not forget that it is the organized farmer who is on the firing line where selfish or uninformed interests might place the farmer at a more serious disadvantage.

Through organized effort we can attain, retain and exercise:

1. The right to run our own business.
2. The right to be heard in legislative halls.
3. The right to develop our own leadership.
4. The right to better our opportunities.
5. The right to exert our energies to the best advantage to win the war.
6. The right to guard against post-war crashes.

I wish to express my personal gratitude for your kind consideration and the many courtesies extended me while here.

Although Maryland is a small State, yet there is nothing small about the heart and the spirit of its farm people. You are magnanimous. I am, indeed, proud of you. You deserve the best that is in me; and that will I give!

MR. NUTTLE: We are going to give some time now to our Rural Youth, and I am going to present Miss Dorothy Emerson, who will now address us.

ADDRESS

MISS DOROTHY EMERSON, Girls 4-H Club Leader

"Your children are not your children. They are the sons and daughters of Life's longing for itself. They come through you but not from you, and though they are with you, yet they belong not to you. You may

give them your love but not your thoughts, for they have their own thoughts.

"You may strive to be like them, but seek not to make them like you. For life goes not backward nor tarries with yesterday."—From the Prophet.

Last summer a farmer and his wife left their big farm on the Eastern Shore and went to Kansas on a vacation. While they were gone the farm work and home work were done by their four children, ranging in age from 9 to 20. These 4-H boys and girls did not come into their ability to take this adult responsibility overnight. They had been learning under their parents' direction for years.

In most rural homes young people have a share in the responsibilities and can take over in an emergency.

In our American democracy have we not the same obligation in a community to train our youth to be ready to take over the responsibilities that will soon be theirs anyway?

Suppose tomorrow all adults over 25 years of age were to leave your homes, communities for a week? How well would the home, the business and government go on?

It is not only our duty but our privilege to work together with the older youth in the community. We cannot do so without gaining ourselves.

A man said to a woman, "I think you are in your second childhood." "Well, if I am," she said, "I'm having a lot better time than I had in my first one." It's fun, it's challenging to think and work together with youth. People often say, "If I only had my life to live over again, I would do this and so now here is a chance to live it over again by passing on your experiences to those who will follow you."

Paraphrasing an old adage one might say, "Tell me what you think about young people, and I will tell you what you are."

We cannot afford to leave our young people without giving them some of the things we have learned and this can best be done by example: what you are speaks so loud, I cannot hear what you say. The importance of sound morals, the need for spiritual study in order to have the comfort of spiritual faith. We must help them to know what is of real value in this world, to learn to be satisfied to live within their income; to understand that a "Standard of Living" is not necessarily and wholly a material standard but a standard of higher living. If we believe in a Democracy, we must tell them that personal liberties must often be set aside for the good of the group as decided by the majority.

Dr. McClosky of Michigan, speaking to the youth in Chicago, addressed them as the group from which will come the leadership for the national agencies of tomorrow.

Statistics show that a very high percentage of leaders in city life, industry and government were formerly country girls and boys. He calls the greatest waste in America today the fact that we do not make use of the power of our young people.

The Who's Who of America for ten years ahead is being written today.

I have already met the young man who expects to be Governor around 1960. He anticipates being elected by the rural people of Maryland. I haven't any doubt but that he will reach his goal.

Somewhere in North America today every rural problem is being solved by young people.

In some communities they have rebuilt the church, and figures show that 2/3 of all rural people are outside of the Church.

Somewhere in North America young people are surveying the health situation of their community and doing something about it. 41% of the farm youth were rejected for service in this war—not counting those rejected for food production needs: two times as great a rejection as from city youth.

We need to help our youth who want to remain on the farm to have an opportunity to own their farms. The trend away from ownership is a trend away from our American way of life.

Dr. McClosky thundered out to the farm youth that rural America *must* have competent, progressive, forward-looking leaders at the grass roots. Leaders who see beyond their own farm and community to the reality of our interdependence with the rest of the world.

If you tend to run your own farm only and pass the buck of citizenship to others, it will mean the ruination of the country we live in.

If there is anything needed in this rural America, he said, it is to spread the 4-H program for boys and girls 10-21 and also provide for this older rural youth group. In the old fable of the city boy and the country boy who exchanged visits, you recall how each one had a great shock and adjustment to make.

Our rural youth need urban experiences. Too many of them today have been rushed into places of responsibility in city situations and have not been equipped to meet them.

We have just recently returned from the National 4-H Club Congress held in Chicago. Twenty-two Maryland youth attended. Writes one:

"One impressive thing about our stay was the fact that everybody was from the rural community and proud of the fact. Proud of being 4-H farmers furthering the nation's well-being. It all seemed just out of this world. Chicago is so immense. Walking such long distances,

shopping in those huge stores, being a part of the hurry of a big metropolis. It was an experience none of us will ever forget, doing things which we may never get a chance to do again. Hailing taxis, finding our own way, gaining all the practical experiences as well as enjoying all the well planned programs, entertainment and such. It can never be estimated, and a mere thanks seems so small."

There has never been such an opportunity before for youth, and many are not mature enough nor have the background of experience to meet their responsibilities.

Give them opportunity now to think, plan, and reason with you on community affairs.

Somewhere in Maryland today rural youth are solving their recreation problem. Meeting after chores are done to square dance to the tune of a fiddle. Is it your community?

Somewhere in Maryland today rural youth are meeting frequently to discuss and debate post-war plans for their community or county. They are calling in the minister, the lawyer, the School Board, the legislator to talk to them. Is that your community?

A woman friend of mine said to a man, "How old would you say I am?"

"Well, I hesitate whether to make you ten years younger on account of your looks or ten years older on account of your intelligence."

Do not hesitate on account of the age of these rural youth; take a chance on their being ten years older in intelligence when they get down to brass tacks than they appear on the surface sometimes.

Rural youth are thinking, and they are ready to take an active part shoulder to shoulder with you in solving rural problems—America's problems. Only an informed people can be a free people.

"Tomorrow the world" used to be a Nazi boast. Today it is a reality for the youth of Democracy. The world will be theirs.

But, as the poem says, "There never will be a tomorrow, for tomorrow will prove but another today." The only place we ever *can* live in is always TODAY.

What are we waiting for? Give them a place on committees today. Listen to their viewpoints today. Work together, cooperate today.

MISS EMERSON: I am going to ask Mr. Downey to present the next speaker.

MR. DOWNEY: It is really a joy to present this next speaker, a type of boy you have been discussing, a boy of high standing in the High School F. F. A., now President of the 4-H Clubs, and one of the top F. F. A., Donald McKnight.

THE VIEWPOINT OF A 4-H CLUB BOY

DONALD MCKNIGHT

Thank you, Mr. Downey, for that introduction. I appreciate that a lot.

We are living in the midst of a turbulent world, a world full of chaos and dangers, a world where everything is being challenged, but through all this there gleams a light,—a light cast by the virile youth of this country,—the 4-H Clubs of America. 4-H is an education; it is a different kind of education. 4-H is a type of informal education outside of the school room; in other words, one learns more by actually doing a job than by studying about that job. 4-H has proved the value of that kind of training. The 4-H Clubs of America are today the largest voluntary youth organization in the entire world. We say "voluntary," because membership in 4-H is voluntary as compared with the totalitarian clubs such as Hitler used in Germany which were compulsory. 4-H is an American movement, largely democratic. 4-H has the welfare of each individual at heart, that is the real value of 4-H club membership. America has good cause to be grateful for ever-increasing growth of this group of active, intelligent citizens who are working among other democracies with a united desire to make the best always the goal.

4-H members are today achieving success not alone in farm work, but in other lines of endeavor. The 4-H alumni has outstanding citizens in all walks of life, and a large part of their success is due to 4-H training. These people tell you what their 4-H experience meant to them. 4-H training and education makes its members able to cope with every situation. At every turn, 4-H shows the way to better farming, better business, better homes, better everything, because 4-H means making the best effort always.

Personally, I almost shudder to think of my life without 4-H training. My experience in judging livestock, farming, conducting business meetings, public speaking and traveling will have an important influence in my future life. The acquaintances I have gained, the many friendships I have made have all been gained because I am a member of the greatest bunch of young people in the whole world, and this will linger in my memory all my life, always, as a wonderful group of young people wherever they may be, on the farms, in the cities, or in the armed forces of the world.

4-H offers an opportunity to grow, to learn, and to appreciate the beauty of farm life, the chance to do something, to be somebody, to prepare for a successful life, to fill a life full of good, worthwhile things.

4-H has truly had a great past, but what of the future? What of the years ahead? Personally, I do not think we need worry too much about

these boys and girls; they have proved they can take care of themselves. As Miss Emerson has told you, their tomorrow begins today. In the future, I believe that 4-H will continue to be a great factor in the world, club members will appreciate their privileges and profit by the American way of life, they will be strong for their own good, and they will help their fellow workers; they will strive to preserve their freedom and stand firmly for the sovereignty of all the people.

The 4-H members of today will be the leaders of rural America tomorrow, not that they are more brilliant than other young people, but rather that 4-H creates a spirit and an attitude in the minds of American youth which makes them want to make the most of every opportunity.

Tomorrow's leaders in the Farm Bureau and other organizations will come from the ranks of 4-H youth of today. When you are doing good work for our club work, you are helping your own organization. The Farm Bureau has had a share in promoting club work from the time of its organization. The American Farm Bureau has been interested in plans to help youth to have the right ideals in the philosophy of life. I want to take this opportunity to thank you for what you have done in advancing our club, and in thanking you I speak not alone for myself but for every one of the 11,000 club members. At the same time, I want to ask you to continue to do everything you can in your power for the advancement of this work. There is a pressing need for more of the kind of training it provides. This magnificent club work is now only reaching 15% of our rural youth. Our own Club cannot falter, it must press ever forward with this spirit. Our youth are entitled to have every opportunity to increase in knowledge, stature and intelligence to the fullest extent. America needs the kind of leadership that 4-H provides in this period of world chaos. With the Grace of God, we will accomplish our purpose.

I thank you for your very kind attention.

MISS EMERSON: The success of your people today during the world crisis will depend upon their home training, their school education, and from such organizations as the 4-H Club which plays its part in bringing them to greater fulfillment. I am now going to present Anne Lee Tipton, of Montgomery County. Anne is 20 years old, she had 10 years of 4-H Club work, she is now doing government work. Her two brothers are in the armed services, her mother is a local leader. Anne will speak to you from "The 4-H Girl's Viewpoint."

THE 4-H GIRL'S VIEWPOINT

ANNE LEE TIPTON

Yes, our tomorrow does begin today. I know of no better way to build tomorrow than through youth—4-H youth. And so this afternoon I

would like to share with you the importance of older youth in the building blueprints.

But before we delve into the construction of tomorrow, let us first recall the foundation that 4-H has already laid. It is an organization that I feel very strongly has well fulfilled its purpose of serving the rural youth with an incentive to make the best better, creating a genuine love for the job that must be done. 4-H dignifies the work of the hands and helps youth to find personal pleasure in a task well done. To do is our ideal, to have learned while doing is our accomplishment.

4-H has taught us tolerance and understanding for the thoughts and desires, rights and privileges of others, such respect beginning in the home, learning to give and to take. (Sometimes I think my mother "took" the most). Such tolerance, we learned, did not stop just there, it embodied not only our associations but our thinking as well, leaving with us the impression of intellectual honesty.

With such a background, older youth must NOW be given evidence of their importance in sharing with adults the responsibility of tomorrow. As I look back to 1941 to 4-H National Camp, I recall that one of the outstanding thoughts brought out by the delegates at that conference was the need of youth's first responsibility to the three units that go to make up the community. You ask, "What are those three units?" The home, the school, and the church.

Youth have definite ideas along these lines of how they can best help to meet such responsibilities. We are fortunate to be in a democracy where we can express our thoughts and desires, but we must be given an outlet for our expression. Proof of the alertness and awareness of 4-H youth to take an active part in this democracy, particularly in our present war, is evidenced by Red Cross sewing, salvage drives, food production and preservation, renovation of clothing, blood banks. 4-Hers have worked unceasingly in their efforts for the war and they can do so equally in their acceptance with adults of community responsibilities. Activities such as community recreation, spiritual gatherings, 4-Hers can do a lot to promote Sunday night services, organization of training programs for youth to help them find themselves in our present world of competition, plans for the acceptance and place of the returning veteran. At our annual county banquet this past December (in Montgomery County) we had with us a former 4-Her, now in service who had just returned from 31 months in the South Pacific. When called upon for a few words, he said that he was amazed at the progress that 4-H had made since he had entered service. He had always appreciated the foundation that 4-H had given him. You can be sure he is one G.I. who is looking forward to the 4-H for help in solving his problems as a returning serviceman. These are but a few of the activities that 4-H youth can accept in our building program for the future.

But if 4-H has its responsibilities and problems, it also has its opportunities. Many are the 4-Hers who can thank the Extension Ser-

vice and other rural groups, such as the Farm Bureau, dairy and other associations, for the privileges and awards they have extended to them. We are indeed grateful to those who have been unceasing in their efforts to promote 4-H programs.

I can assure you that the opportunities and benefits that 4-H has given to me cannot be measured by any set yardstick. For myself, I am particularly thankful for the honors that have been mine, but of all—the happiest day was just this past summer in August, when it was my privilege to sponsor the Liberty Ship, the S. M. Shoemaker. Those who witnessed the christening share with me the thrill that came when that great, massive, silver-gray steel, so majestic and beautiful, and yet so strong and straight, slipped down the way. As she turned in the clear, sparkling water, the sun shining on her silver coat, each of us thought of this ship, built in only 28 days; a master product of time and man, as one ship nearer to Victory. One ship that might battle its way in the South Pacific, the Aleutians, or on its journey to Europe, but on whatever far-flung battlefield of the globe, one ship that would prove to the world the unconquerable spirit of the American people to preserve the rights of Democracy, a democracy of which the 4-H was glad to be a part.

Contrast such a picture with the 4-H of Germany, comprised of Hitler, hatred, hysteria, and hunger, and you can readily see why we are so strongly determined to accept our responsibilities for tomorrow by planning and building today for an everlasting peace in a world of which an ARMY of youth are expressing themselves as the generation of tomorrow when they say—

I PLEDGE

my head to clearer thinking
my heart to greater loyalty
my hands to larger service and
my health to better living

for my CLUB, MY COMMUNITY AND MY COUNTRY.

MR. NUTTLE: I know we all appreciate the privilege of hearing these young people and Miss Emerson. They are in our thoughts a lot, though we do not give them much chance on our program.

I know you remember that speech, the last one this morning, where we heard that from 1870 to 1940 the proportion of the people of this country engaged in agriculture had fallen from 40% down to 18% or 19%, but way back there when we had a better proportion of the national population on the farms, the people growing one crop were easy to set against people growing other crops,—the cotton men against the corn men, the wheat men against the livestock, and so on. The biggest application of the Farm Bureau is that we have learned through the leadership of men like our President to figure things out better; we have learned to pull together, and the only reason we have been able to pro-

tect you farmers,—and I am now speaking from the attitude of the National Board,—is because even with that 18% or 19% we speak with one voice.

It is a great privilege to me to present to you the President of the American Farm Bureau. He is actually a cotton grower in Alabama, but he leads all of us. I do not like these pressure groups in the National life in Washington. I would prefer to think we might all go to Congress and lay the facts before the members and they would give us justice. I hope that may come some time, but as long as labor and the other pressure groups are going there, we have got to do the same thing. We have the votes, and we have to do the same thing. We people here in the East, where the majority of our population lives in the city, would not get far if we did not have the support of the South and the West in these national problems. Those labor groups want cheap food and high wages. Our only hope was to have a national organization to work for us, and the President of that is my distinguished friend, Mr. Edward A. O'Neal, whom I am glad to present to you.

Mrs. Weagly escorted Mr. O'Neal to the platform, and the audience rose in his honor.

ADDRESS

EDWARD A. O'NEIL, President American Farm Bureau Federation

Thank you very much, Harry, and the lovely lady who brought me to the platform. I always say if I ever get to Heaven it will be because of women.

I am sorry I could not have been present at your whole session this morning. I would have liked to hear your President's address; I know it was very intelligent. This afternoon I have enjoyed seeing and hearing these lovely children. The big Farm Bureau family will always be a bulwark to me. It is a joy to me always to come back here. Thank God, we still can have in America different types, different characteristics of men whom we say are really made in the image of God, though a few of them certainly seem to be made in the image of the Devil.

Over here in this State you have a wonderful type of agriculture. I have told several Presidents of the United States, when we were discussing the policies of the great nation, we need some of the characteristics of the Maryland farmers, of the Maryland people. It is a great pleasure to work with Harry and your other leaders. I always feel when the critical times come with great issues we can always count on Maryland. You have played a major part in saving American agriculture and protecting the rights of the farm people. It is very gratifying to me to see the great growth of Farm Bureau in recent years in your State. I hope it is just the beginning. I feel that American farmers are becoming conscious of the fact that they must belong to an organization, if

they are to play their part as citizens of this great democracy; they are beginning more and more to realize their responsibility. I have told you good folks before that the farmers still remember that National Convention we had here, and some of them will get together still and recall the high points of that convention. We would like to come back here some day, when the day comes that we can travel again.

Harry said in his introduction that it is a fine thing that farmers have forgotten sectionalism and have greater unity today. I attend Grange meetings, and the Grange members come to our meetings. Our differences are all being ironed out. I have spent hours at the White House talking to the man who to a great degree moulds public policy for us, tells the President, or at least gives him advice, and I am surprised at the unity of all the great National groups. I think they all want to forget their differences; in Chicago the farmers all showed the greatest unity I have ever seen in a large group. We have all got to work together to save democracy. Thank God, I think the farmers realize that more than any other group.

I think you people are to be congratulated on the growth of your membership. Think you should pick out the farmers who do not belong and look them in the eye—don't spit in their eyes, that would be the last resort—but look them in the eye and ask them this question "All right now, do you think you have your own destiny in your own hands? Do you think you can go and do as you please without the aid of your neighbor, or the farmer in California, in Indiana, or Illinois? Do you think unless you had cooperation from them that you are safe on your farm?" Look them in the eye and ask them that, and if they think they can get along entirely by themselves, then apply to the County authorities and send them to the insane asylum. That is where they belong.

I can say from my own experiences,—many of you have heard me tell this before, but I think I will repeat. I started out with a man who ran for the Presidency,—John W. Davis—in 1924. He is a great man. I did not have the advantages of the Land-Grant College. I did not have all that. I remember when Woodrow Wilson set up the Extension Service. I remember all that. By the way, I am a Doctor in that Land-Grant College,—I would like to know what that means, but I am a Doctor of Agriculture, made so by the Land-Grant College. I learned about the farm by helping my father and my grandfather. My grandfather was Governor of the State, my great-grandfather laid out the State,—my uncle too was Governor. I watched the policy of those times. I thought how the State could best be run when 70% or 80% of the people were in agriculture, and I made up my mind, if I could arouse the farmers to their own interest, I would do so. I would organize the farmers. Now that group is over 800,000, and down in my former State, as organization has grown, they are the dominant group in the councils of the State. There are now 51,000 organized in my State. Now, this is what

organization stands for,—an opportunity to sit down and talk over the program of the organization,—you as a representative, listen to our program and point out where you as a citizen representing us think we are wrong; if we are wrong, show us how to correct that wrong.

I do not know of any organization in my life that has done more for the people of their respective States than has the American Farm Bureau. I attend the Grange meetings. The Grange is strong, it is wonderful the way we work together. Today, I just had a telephone call asking me to attend a meeting of representatives from powerful groups to get together on an educational program in regard to the problems of the immediate post-war world, not only in our own nation but in other nations. We want to do this today, not tomorrow or the next day. Let's really get to work for the future, the future that will affect those lovely children we had here today. Personally, it does not make much difference to me,—I will go to Heaven or Hell in a few years, but I know what it means to them, and I know you and I in our hearts want to do for them the best that we can. Why should we farm people, whether in the Grange, or the Farmers' Union, or the co-operatives, or the Farm Bureau, differ as to the essentials? We know where Hell is, we know where Heaven is. Let's all go to Heaven together, not the other place. Some of you think I am too serious. I think this is the time for every American to be exceedingly serious, and, therefore, Harry and Phil Turner, and Mr. and Mrs. Weagly, Mr. Wise,—all your leaders in Maryland, will carry the message to Garcia,—not only from the Farm Bureau, but from the Grange and all the other organizations interested in agriculture, will organize, and agriculture will claim the major part that it has got to play. It is not important whether you are Democrats or Republicans today, you have got to play your part in this world situation. We have serious problems confronting us.

But, I want to get back to our own farm program. We have the largest farm organization in the United States,—I do not say that in a braggadocia way,—and we feel we represent the voice of the people from the farmer's viewpoint. They tell us the national income of farmers stands at the highest in our history. By the way, I was talking to one of the high B. A. E. men the other day and he was telling me that. They don't average with the other working men in the United States. But, we have that income, and we ought to thank Heaven for the farm organizations and for what they have done in the last 10 or 12 years. We have been trying to get parity for 8 years. Parity means we have bought and sold for a fair exchange of value and received a fair income as compared to other things in the United States. We have only had parity for the past three years. I told the President of the United States he was not fair to the farmers. I told Chester Bowes,—“Why, dog-gone you, when you say the farmers' income is so high, you don't remember that before it was 30 feet below sea level when we started to compute that in 1939, when we were getting 6 cents for cotton, and now we are only about 10 feet above.”

They say we are greedy;—we are not greedy. We have done our job, with five or six million people less on the farms than we have ever had in the history of the United States. I will go into that a little later. Now, we have only had parity for three years. We have tried, as far as we could, to have it written on the statute books. We sweated for 10 years to get started along. You people in this area perhaps ought to thank God that you are close to markets; you do not have the problems other sections have. You did not hit the bottom as other areas did. You did not have to burn corn in Maryland, or burn wheat in Maryland as in Iowa and Kansas. They had no money to buy coal, and it was better to burn the corn,—it was much cheaper than coal. Now we know, and thank Heaven for your organization that we know, even if we had to sweat to get that knowledge. We have learned that we have got to hang together or we would certainly hang separately. We have got to teach the American people what we have learned. You remember that in the Lord's Prayer,—I don't know how many people here in Maryland say the Lord's Prayer, but those who do will remember—we have first "Give us this day our daily bread." That comes before the "tress-passes." How many people in New York or in Baltimore ever give a thought to the meaning of that? Today the women and the children, and a very large percentage of children, are helping to produce that food. In Iowa, last summer, I saw old fellows, bald-headed old fellows working in the fields with boys 14 and 15,—the age of the grown people more than 55. You have that in Maryland, I am sure.

Now, my friends, we asked for parity prices in our production program, and that program was much better than we had in the 20's. We had 12 basic laws written on the books. You know, one reason we have such a big agricultural income today is because we have price plus volume,—a lot of volume. We have held back cotton and corn and produce of that type, and we have those great piles of food saved up because we wanted to get the price to protect the income of the farm people. I know in some parts of the United States, especially in the West, farmers do not believe so much in agriculture adjustments. They protest against the Government coming in and spending billions of dollars, and having artificial bread lines, and feeding people whom they call the low-income people. I believe, myself, that a man and a woman should work for the daily bread, and a large percentage of the farmers think that way. We are willing when people are in dire distress to have the stamp plan to give them food, and it is probably a fine thing for pupils to have school lunches, but we have to be careful how we handle those things, as they are apt to bring about very corrupt practices not unknown in the nation.

We believe, however, that we should continue that program. Take the tobacco farmers, they are apt to have too much tobacco, and they feel they are not getting a good price for the tobacco,—we hear a lot today about the shortage of cigarettes, but that is not the fault of the

tobacco growers; that is the fault of the lack of labor to make the cigarettes.

We have this law, the Commodity Credit Organization. You people are familiar with that; it makes loans to farmers. That is not so big when you compare it to what the R. F. C. has loaned. But, that is for farmers,—first at 52% of parity, now up to 90%. Naturally, they have losses, but when you compare what the Commodity Credit Organization has done for the farmers with what the R. F. C. has done for bigger business, it seems very small. Then, we have this price program where the price is guaranteed by the Government provided Congress appropriates the money to continue from January 1st until the war ends. We want the people to know the truth about these matters. It has cost the farmers comparatively little money compared to the great war plants. We have no great assembly lines like Henry Ford where they can walk down there and collect \$1.00 an hour.

The world would starve to death if we had no family farmers, employing a very small percentage of labor on those farms. We produce and we ask for support of prices, and Congress has got to take care of us. It ought to be worked out in a practical way. I told the War Food Administration, their advisory committee, I have talked this thing over with Woodrow Wilson, with Harding and with Coolidge, and advised them,—and then they go and do some other thing,—anyhow we are saying now that we want to know the truth,—tell us the truth about farm machinery, and all that. If you want eggs, if you want hogs, we will produce, but we must get a fair price for our product, and then they go and put ceilings on them. We want those ceilings made right, we don't want them to build the ceiling in the cellar. We don't want money given to us, we want to sit down with a paper and pencil and figure out just what we can do. Let the farmer know what he can expect. I have two of the finest boys in the world. When I was raising them, the little hickory switches were there to be used when they were needed; they were not needed often. We say with these problems, we don't want to switch, but the switches are there if they should be needed; that is what we want to do with the adjustment program. Down in North Carolina, we believe in production control. I am not going to take too much of your time on that.

Now, we have those 12 basic laws on the statute books, and I am sure the Congress of the United States will take care of the needs of the farmers. They speak of need for war implements, and they must not forget that food is just as important a war need as anything else. I saw the figures; they said we produced 43% more than we did in 1918,—the more recent figures put it at 33%, and that with five or six million workers short on the farms.

We farmers are saying we must trade with other nations of the world. My memory goes back in the history of the United States to the men who formed our policies,—to Hamilton and Jefferson and all those other

great men. They worked along conservative and liberal lines. They started out right. We know we have got to trade with other nations. In this country, we have to trade with other groups. Some States pay more for labor. In Alabama we pay more for farm labor. How can I make money on my farm when I pay 70 cents out of every dollar on my income. Then men in Baltimore pay 40 cents. In America, we have more men in the farming industry than in the other war industries. We are the great producers of wealth.

I am going next Tuesday to join in a conference with 17 great national organizations,—the C. I. O., the A. F. of L., United States Chamber of Commerce, and other big national associations, the Veterans, the American Legion,—17 in all. We will talk together, and I am sure we will all agree that we have got to trade. We will all sit around the table, and I will speak for the farm people. I will tell them we want to be protected,—we do not want to do away with the tariff. We had the tariff when America did the greatest trading it ever did. What are we going to do with all these things we will have after the war ends? We have got to trade. We will have to stabilize currency, we will have to have a sound money program. Now, how are we going to trade? That is what I ask you?

Now, my friends, we have a war program. As Mrs. Weagly said, the ladies have 15 resolutions,—if you have not, you should read them. The American Farm Bureau has 25. We have a definite program to meet the immediate needs and the needs of the post-war world. If we can persuade the Congress to put into the laws of the nation our suggestions, I am not worried about these boys and girls we heard of today.

Now, I want to say something to you about your distinguished Senator. Senator Tydings had a great deal to do with this draft business, protecting the farm people. I will say this to you, I asked General Hershey,—I was a member of that Committee,—I asked the question directly "Are you going to carry out the law? We are going to insist you carry out the law." He said "Yes, we are going to carry out the law." The provisions of that law,—it is very short—are that the 4-F deferred people are to be checked over by the Selective Service and if they are really going to stay on the farm they are permitted to stay there where they are needed during the duration. Of course, the Amendment said they were to stay until replacements could be made, but where are we going to get any replacements today? They say to the men "If you are farm boys and are needed, then that is where you must stay until the war is ended." I asked a lot of young colored boys "What do you think about it?" They said "Well, after all, Governor, what the hell! We are all subject to the draft. If that's the law, we are all right." I have two sons of my own, one volunteered,—one is in the South Pacific. One, a young lawyer making eight or ten thousand a year volunteered and went in at \$25.00 a month. There are thousands like him in this country.

I think the Selective Service is all right, but I think the other set-up is uncertain,—mighty few of them will have to go in this extra group that they are setting up. If they go in, they are certainly branded as "S. B.'s,"—you can't fool a boy, not very much. They ask me and all I can say is that I do not want universal draft at all, I do feel that under the present set-up, with the Tydings Amendment, we are safeguarded but I do think the farm boy who stays down on the farm, and is willing to do his part in this industry, should be given some distinction. I asked the President of the United States. I said "Boss, I would like to do this, give some distinction to the boy who has to stay."

He said it could not be done.

I do appreciate this opportunity to be with you. Forgive me if I have been too strong in my language. I try to act as strong as I talk. Forgive me if I express myself as I do. I use the same language with everybody, even the Committee in Congress.

Thanks very much, Harry and Mr. and Mrs. Weagly, Mr. Turner, I appreciate your splendid cooperation. Why in Heaven, with the great organization you have in Maryland, every farmer does not belong, I do not know. I believe if you will just go up to him and look him in the eye and explain matters to him, he will belong. God bless you, and I thank you.

MR. NUTTLE: I know you all appreciated this message from President O'Neal. He is rather forceful in his choice of the English language at times, but somehow it does not offend me. It seems to put the matter over. I tell you I would not want that job, even if I could do it.

We are fortunate to now have an address from an officer in the Quartermaster General's Office of the Army. It gives me great pleasure to present Major Corns, who will speak in the place of Major Leslie J. Lindell, who was unable to be present.

Major Corns presented an address, which he said had not been O.K.ed, and he would later send a copy in if approval was secured. Copy of his address was not available.

MR. NUTTLE: We all want to get our boys back. We do appreciate your taking time to come down here this afternoon, Major Corns.

The last speaker of the afternoon is a man who has had 26 years service in the army, and has just returned from the Mediterranean area. He is going to tell us something about feeding the American Army in England, North Africa and Italy, Col. John J. Powers, Director of Food Service for Third Service Command.

FEEDING THE AMERICAN ARMY

COL. JOHN J. POWERS, Third Service Command

It affords me great pleasure to be with you this afternoon to tell you something about how we are feeding the American Army. You are

familiar with the word "rationing" and how it affects your daily lives. In the Army, the word "rationing" is confined to the food allowance for one man for 24 hours. Normally, that is served in three meals. Occasionally, however, due to pressing conditions, it is served in two meals, and then again when men are working at additional labor for long hours a day we give them four meals in 24 hours. It was not such a hard job when we were taking care of some hundred thousands of men, but now we are confronted with the task of feeding eight million men instead of 175,000, and a very different picture exists.

Along about 1940 we realized what was coming, so in collaboration with the Department of Agriculture and other interested agencies a Board was formed to determine in advance a good estimate of the total quantity of each item of food that might be available during the coming year. That estimate having been arrived at we set a certain percentage aside which we considered to be essential to maintain our army, the balance to be reserved for civilian use. In some commodities that percentage went as high as 45%, even though the Army received only 10%; in other commodities only 5% even though there was the same percentage. That is one of the main reasons why you have today certain items strictly rationed and other items not rationed. Having determined what items of food were available and in what quantity we gathered together some of the best nutritional experts of the United States in the office of the Quartermaster General, and we devised what is known as a mass menu. This mass menu lists the items served at each meal over a month and not only does it provide what will be served, but also the exact quantity that will be needed to serve that menu to 100 men for that one day. With that basis of 100, it was easy to compute for eight million. The real problem comes in securing it whenever you want it, and distributing it to places where you need it. The first type of ration is what you yourself would consume in a day. That is, what we call Type A ration. It consists of a combination of fresh meats, both canned and fresh vegetables, canned and fresh dairy products, beverages and miscellaneous. It is a normal food which the American soldier has been used to receiving in his own home,—Type A. That ration is used exclusively in the United States and wherever and whenever possible to serve it abroad. However, we visualized conditions under which it would be impossible to depend on any local food being available at places that we invaded, or if food were available, we did not know whether it was fresh or whether there were any refrigeration facilities available to keep that food from spoiling. So, we had to devise what is known as Type B ration. Type B, consists exclusively of non-protein foods, canned meats, a substitute for fresh meats. We used canned fruits, canned vegetables and canned fruit juices exclusively. If necessary, substitutes were used or dehydrated juices, etc. That ration is just as good as Type A, but lacks the appeal that fresh food gives to the meal.

We had to go even further than that. Type B ration contains about 92 items, each one packed in different cans, which makes it rather bulky. We had to visualize conditions where men are attacking a beachhead against an army where it might be impossible to carry food in large quantities, or to insure at the same time that the men got the food, in view of the limited storage space, inasmuch as so much storage space had to be used for ammunition, etc. Therefore, we had to devise what is known as Type C ration. This consists of only six cans, No. 2 (12-ounce cans). In three of these cans we packed a combination of meat and vegetables, a sort of pre-cooked meat and vegetable, a hash; in the other cans some coffee, some cocoa, some powdered milk, some hard-candy,—that is about all. The meat and vegetable combination in a can could be consumed cold, and was very frequently consumed cold; it was palatable that way. However, the palatability was increased by heating,—all the men had to do was to put the can into any container of hot water, and heat it up before opening the can, and that made it more palatable. That is what is known as Type C ration.

But we had to go even further, and visualize a condition where it would be impossible or impracticable for the men to carry even these cans of food on their person. To a man carrying 50 pounds of necessary equipment on his back every little added seems like a ton. So, we had to devise the Type D ration, which consists of a four-ounce chocolate bar,—not the same that you can buy in a candy store. This candy bar will not melt until it reaches a heat of 115 degrees Fahrenheit. One bar contains 1,600 calories, and is sufficient to appease hunger and retain body weight and give the man necessary energy to keep going. It will keep a man going for three days without any noticeable loss of weight. Beyond three days it is not desirable.

We have one or two other rations,—the K ration very similar to Type D. We also have what is now known as the Ten-in-One ration, very like the B ration, which contains all the food that a man normally needs,—all that is required for 10 men in one day. In the other countries we have to think of man power for carrying this food; most of our men have to be put in the front lines; therefore, we use native labor where we can. We used that exclusively in North Africa. It is difficult to sort out the food, we have had all sorts of difficulties in getting the men to sort out the food so as to get a balanced ration. In addition thereto, it is necessary to do all this storing, and all of this hauling. It was because it was so difficult to get the food sorted that we devised this plan to pack the total food for 10 men for one day in one box, and all we had to figure then was how many men we had, and for 500 it was all right to have 50 boxes of food opened, put them on a truck and send that on. Even if 500,000,—it was just a matter of arithmetic. It works out beautifully.

Now, for just a few experiences in actually putting out that food in the three places where I was stationed.

First of all in England. As you will recall, we sent some of our troops over to England as early as January, 1942. From that time, up until about August, it was necessary for the British Army to feed our American soldiers, because our rationing had not been developed to the point where we could take over. The British Army ration might have been a very good one for the British Army, but it was not very well liked by the American troops, as they were used to good old American food. We changed all that about August, 1942, and provided the American soldiers with American A ration. However, we could not use it long, because we could not get fresh meat and fresh vegetables, etc., because England does not have the refrigeration that we have over here. They very seldom used ice, and so they did not have much refrigeration. However, through lend-lease we succeeded in building for England big refrigerating plants at several places, so we were able to get sufficient refrigeration to provide at least one meal a day to all of our soldiers consisting of fresh meat and fresh butter rather than canned. One other thing happened over there. We were used to white flour,—72%. England had been using natural wheat,—90%, almost whole wheat. It was not so bad, but it was not long before we started to combine the two, mixing an equal quantity of our flour with theirs, and that made about 80%, somewhat similar to our Graham flour, a little heavy, but not too bad.

England had been primarily an industrial country before the war; it imported most of its food. They now realize that was not the proper thing for a country subject to war, such as they now have, and they have changed over tremendously from an industrial country to an agricultural country. Where they were about two-thirds dependent on outside sources prior to the war, they now take care of about 90% of their people on the essential food items.

I left England in December, 1942, to go to North Africa. That brought an absolutely different condition. North Africa has an ideal climate, the most wonderful climate in the world all year around. The temperature very seldom gets below 40 degrees or over 80 degrees. Most of the year it is very dry; two months in the rain season. There are immense stretches of waste land, where nothing can be grown, but in the fertile sections they can have wonderful production. Very few people live in the desert spaces, where it is so difficult to produce food, but in the fertile sections like Casablanca, they have three times as much wheat and vegetables as they can use. In Oran and Algiers and around there they grow 5% of their needs. The transportation was poor,—and I have seen thousands of tons of food rot in the open, ready to be picked and hauled away, but nobody to do it, while in other places thousands of people were starving for that food that was lost. As far as food for our army was concerned, we did not depend on anything from North Africa, but one thing we could get in abundance there for four months in the year, and that was oranges and lemons. Our boys did enjoy them. They never saw an orange in England.

We had to use Arabs in North Africa to haul our food. They are very uncertain; there thievery is something to be praised, and not to be put in jail for. The better thief you are, the more you are thought of there. The black market thrived. We found out one thing,—an Arab does not like pork. If he touches pork, he is shunned and all his relatives. We marked our provisions "Pork." We went further, we caught an Arab thief, and made him eat pork; that man was shunned for the rest of his life, nobody would go near him with a 10-foot pole. We could get all the food we asked for from the United States, but bear in mind, it was quite a task to get it there. If you figure on four and a half pounds per man per day, and multiply that by the number of men we had there for a period of 30 days, it would take three and a half Liberty ships to carry it. It really took 28,000 tons of food each day, and that is a lot of food to handle. So much for North Africa. We got by there with very little trouble.

In Italy, conditions were really bad. In North Africa there was not so much destruction except around Tunis, but in Italy in order for us to get a foothold there had to be a lot of destruction. The German army also did a lot of destruction. As a result of this destruction, millions of people in Italy today are homeless and their household effects were completely destroyed. They have no means of livelihood whatever. Their fields are mined, they are afraid to plow them. Italy, that beautiful country, was overnight demolished. The drainage that they had taken so long to establish was overnight destroyed by the Germans. Fifty per cent of the wheat fields destroyed. You know Italy is one of the largest users of wheat in the world per capita. Their dish three meals a day is spaghetti. Not only are they homeless, but they are hungry. It was necessary for us to provide all our own food, import it from the United States, but we had to try to get food for 20 million Italian people, who had no food at all. We had a ration for them of 12 ounces of wheat or 16 ounces of flour, one-half ounce of canned milk, one-half ounce of cheese and 2 ounces of dehydrated soup,—for each person per day. That was all we could allow them. They could perhaps get with that a few nuts, and occasionally during the year a few olives. The Italians need food and they need it badly or they are going to starve.

Our American soldier has been well taken care of. If there was any place where the black market really thrived, it was in Italy. A number of our trucks carrying food to our soldiers were hi-jacked by the black market people. However, we got that under control, and very few of our boys at any time went hungry in Italy.

I have seen a lot of captured German rations, I have seen British rations, I know about the Japanese rations. I can truthfully say the American soldiers are and will continue to be the best fed army in the world.

The food that we are providing is well balanced in every respect. We have statistics to prove that. 70% of the American soldiers are

eating better today than they ever did in their own homes. Not only are they getting a large quantity of food, the quality is excellent, and the variety is ample. This is going to have far-reaching effects, because when these boys come back they are going to insist on the same quantity, the same quality and the same variety that they are now getting in the army. I think from the standpoint of a food-consuming nation, we will consume more as a result of the war than we did before.

One other point,—food conservation in the army. We made a survey about two years ago, and we found that about 15% of the food as produced was thrown into the garbage, part of it from not being consumed after they had taken it on their plates. That was a tremendous loss, when you measure it by the number that had to be fed. We found we had to take drastic measures. Our slogan today is "eat all that you wish to eat, but eat all that you take on your plate." That can result in a tremendous saving. If we save one ounce of food from each individual here in the United States, we could feed 6 million starving people over in Europe.

Ladies and gentlemen, from now on I would like to talk to you as an individual, and not as a representative of the War Department, and I am not voicing their views when I say as food producers you will be called upon to produce more than you are now producing in order to meet the requirements of a devastated world which will not be able to come back for at least 10 years subsequent to the cessation of hostilities. The fields where they would ordinarily get their food have all been mined, that has all got to be cleared away before they can be tilled. Farm machinery is practically unknown, they have not seen any new farm machinery for 15 years, a long time before war really broke out. Modern transportation is nil. Above all, man power is gone. There will be millions of people in Europe absolutely dependent on the outside for food for at least 10 years after the war ceases. The world outside of the United States is not a nice world to picture today, as I saw it. We should get down on our knees and thank the Lord that we are Americans and that we have the privileges that we all enjoy over here.

I thank you.

MR. NUTTLE: I know we appreciate this report. We are all glad to hear our boys are taken care of. We are going to do all we can to furnish the food and not waste it here.

Announcements and adjournment.

BUSINESS SESSION

FRIDAY, JANUARY 12, 1945

MR. WEAGLY: We will now have the roll call.

Mr. Wilson Heaps called the roll.

Roll Call of Voting Delegates

Allegany Co.: Harry Barton, Mrs. Harry Barton, Mrs. Lloyd Shaw, J. Wm. Loar; *Anne Arundel:* Arthur Jones, A. W. Taylor, Jr., Hall Worthington, Stephen Duckett, Herbert Giddings, Frank Wimmer, Jr., Mrs. Frank West, Mrs. Herman Moreland; *Baltimore:* F. Ridgely Todd, P. C. Turner, J. F. Lupo, Mrs. Dan Pierce, R. W. Shermantine, G. F. Scheeler, Geo. Clayton, W. W. Boyce, R. F. Armacost, J. M. Hoshall, Geo. Kreib, D. Paul Gore, T. A. Mann, E. Koppleman, G. Wm. Sattler; *Calvert:* John C. Ward, E. R. Watson, Douglas Parran, J. P. Parran, T. B. Mackall; *Caroline:* C. J. Kern, Harold Clark, W. S. Carroll, A. W. Spiering, John Engerman, Richard Gardner, Ross Robinson, Edward Sparks, Theo. Schmick, J. B. Jarrell; *Carroll:* C. Jesse Hull, Raymond Buchman, Mrs. Earl Beard, Mrs. Frank A. Dorsey, Paul Hull, Mrs. Wm. A. Myers, Noah Arbaugh, James Bailey, Mrs. John D. Young, Edgar Sellers, Mrs. Geo. B. John, Wm. Lynch, Geo. M. Tracey, Harvey Shipley; *Cecil:* D. B. McDowell, S. W. Caldwell, Mrs. S. W. Caldwell; *Charles:* W. W. Bowling, Geo. Carpenter, Chas. S. Smith, Jos. Gruss, Philip Gardiner, S. C. Linton, Bob Martin, R. A. Hungerford; *Dorchester:* Sam Linthicum, Herman Rhur, John Luthy, Alton Spear, Walter Lankford; *Frederick:* James E. Ferrell, E. J. Thompson, H. W. Duvall, T. S. Anderson, Hamilton Linthicum, C. Vincent Biser, Wm. R. Zentz, R. C. W. Schaffer, Murray J. Barrier, Austin Younkens, Foard E. Hood, L. A. Gardner, W. E. Fry, J. Dorsey Gaither, Murray J. Burrier, Harvey M. Lare, C. E. Ahalt, J. L. Smith, Elmer E. Hodges, Wm. E. Warren; *Garrett:* Wm. Winterberg, Roy Turner, Charles C. Layman, Ross Spiker; *Harford:* Wilson A. Heaps, J. N. Spicer, J. W. Bay, Fred C. Jones, James W. Davis, J. H. Preston, W. W. Walker, T. L. Adams, T. Roy Brookes, Alex Frey, A. H. Lohr, A. G. Ensor, H. Dennis Reed, Howard W. Turner, Walter Slade; *Howard:* J. W. Lord, H. J. Baker, Roby Mullinix, Thurman Warfield, Mrs. Willis Cissel, Howard Clark, Mrs. Edward Cissel; *Kent:* H. S. Leaverton, B. F. Rash, Wm. A. Bell, Edgar Lusby, Albert Nicholson, Harry Williams, H. S. Ford, Clem A. Davidson; *Montgomery:* J. D. King, Mrs. Sprigg Hays, Willson Poole, E. D. Fry, Wm. Pyles, Thomas Garrett, Robt. Hanson, Willard Harvey, John Muncaster, Mrs. Wm. Pyles; *Prince Georges:* H. C. Townshend, Leon Joyce, Wm. Dean, J. E. Hogue, Chas. E. Moore, Jr., J. Paul Abell, Robt. F. Edelen; *Queen Annes:* J. W. Smith, Claude Smith, Allan McFarland, Gordon L. Shawn, F. Bennett Carter, Linwood Everett, Howard Welch; *St. Mary's:* F. D. Hayden, Paul Bell, W. W. Coleman, Mrs. Marie Coleman, J. Franklin Adams, Leonard Olney; *Somerset:* Harry Keenan, Harry Twining, W. C. Hayman, Geo. Maddox, E. Walter Long, Neal Widdowson; *Talbot:* F. A. Schwaninger, P. J. Shortall, Graham D. Price, Hans Asmussen, O. A. Sanger, Norman Fike; *Washington:* D. E. Rinehart, D. R. Jacques, Carroll Miller, Kenneth Long, Jacob R. Palmer, J. E. Grimm, J. R. Stouffer, Walter Spessard, Austin McKee, J. K. Funk, Howard Swain; *Wicomico:* C. C. Phillips, Carl Smith, Jr., T. S. Hearne, Alex Pollitt, Amos Dashiell, James Bradley, Edwin Twilley, Harry Middleton, Louis Holloway, S. H.

Rayner, Samuel Wheatley; *Worcester*: Letcher L. Colona, W. P. Evans, Robert Dryden, J. J. Morris, S. O. Northam; *Associated Women of the Md. Farm Bureau*: Mrs. C. J. Kern, Mrs. Randall Spoerlein, Mrs. Thos. Culler, Mrs. Edwin C. Fry, Mrs. Frank Hayden, Mrs. Atlee Armour, Mrs. Albert Saulsbury, Mrs. Edgar Williams; *Md. Cooperative Milk Producers, Inc.*: R. W. Shermantine, C. M. Merryman, R. G. Fitez, J. L. Hersh; *Hillsboro-Queen Anne Co-op Corp*: Edwin Warfield, Jr., Chas. I. Boyle; *Md. State Horticultural Society*: M. T. Heaps, E. D. McCain, D. E. Rinehart; *Md. State Poultry Council*: J. W. Snoddy, H. T. Williams, D. E. Matthews; *Md. Stockmen's Assn.*: J. Herbert Snyder, John E. Muncaster; *Md. Tobacco Growers Assn.*: J. E. McCue, Walter W. Stewart, James C. Welch, Estep Watson; *Md. Nurserymen's Assn.*: H. S. Kemp, Daniel B. Stoner; *Md. Vegetable Growers Assn.*: G. H. Stratman, Egbert Hawkins; *Md. Crop Improvement Assn.*: Edwin Warfield, Jr.; *Md. Horsebreeders Assn.*: Janon Fisher, Jr.

MR. WEAGLY: Do I have a motion that this body be a legal body?

Mr. McCue made the motion; Mr. Francis Schwaninger seconded it and the motion was carried.

MR. WEAGLY: We will now have the minutes of the last business session read by Mr. Wise.

Mr. Wise read the call of the meeting and the minutes of the meeting January 14, 1944, and Mr. McCue moved that they be accepted; the motion was seconded and carried.

December 12, 1944

TO COUNTY SECRETARIES AND AFFILIATE AND ASSOCIATE SECRETARIES

Notice of Annual Meeting of Members of Maryland Farm Bureau, Inc.

Dear Sir:

Official notice is hereby given you that the Board of Directors of the Maryland Farm Bureau, Inc., has authorized the calling of the next annual meeting of the Corporation for January 11 and 12, 1945, Lord Baltimore Hotel, Baltimore, Md.; the meeting to continue from day to day until all business that may come before the meeting has been properly disposed of. All sessions of the annual meeting will be held in the Ballroom of the Lord Baltimore Hotel.

Blanks are enclosed for you to submit the credentials of your directors and delegates for this meeting.

Very truly yours,

C. E. WISE, JR.,

Secretary-Treasurer

MARYLAND FARM BUREAU, Inc.

CEW:MD

Enc.

MR. WEAGLY: We will now have the Treasurer's report by Mr. Wise:

MR. WISE: There are copies of this report distributed among you, but I will give a brief analysis.

MR. WEAGLY: What is your pleasure with this report?

Mr. Holmes moved it be accepted, the motion was seconded and carried.

MR. WEAGLY: We will now have the report of the Auditing Committee by Mr. Todd.

Mr. Todd made the report and moved its acceptance, Mr. McDowell seconded the motion and it was carried.

January 9, 1945

Mr. President:

Your auditing committee has gone over the auditing report as submitted by Wm. R. Dance, Auditor, and find his report is correct.

The Maryland Farm Bureau is in sound financial condition; all bills for 1944 have been paid.

We, the auditing committee, wish to commend the management of the office on the efficiency they have shown in this year's operations.

Respectfully submitted,

F. R. TODD, Chairman
JESSE HULL
JOHN W. SMITH
HARRY BARTON
D. B. MCDOWELL
J. E. FERRELL

MR. ANDERSON: I would like to make a motion that the report of the Auditing Committee be presented to us in the future before the Treasurer's report, and we will understand them better.

Mr. Rayner seconded this motion and it was carried.

MR. WEAGLY: We will now have the report of the Membership Committee.

The report was presented by the Chairman who moved its adoption, Mr. Townsend seconded the motion and it was carried.

MR. WEAGLY: I would like to suggest one change so as to coincide with the membership of the National; to have our year starting on December 1st, and ending on the 30th of November. Is that agreeable to this group?

Mr. Linton moved that this change be made, the motion was seconded and carried.

MR. WEAGLY: We will now dispose of the Tax Report. Mr. Wise yesterday gave you an analysis of the important features. What is your wish?

Copies of the Tax Report were distributed. Mr. McCue moved it be accepted as offered. Mr. King seconded the motion and it was carried.

MR. WEAGLY: We will now have the report of the Resolution Committee. It has been brought to my attention that there are **not enough** copies of these resolutions to go around, so if anybody without a badge has a copy, please hand it over to the delegates, as they really should have copies.

MR. LEAVERTON, Chairman of Resolutions Committee: I wish to submit for your approval the following resolutions:

I will read the Foreword first.

Mr. Leaverton moved its acceptance, Mr. Townsend seconded the motion and it was carried.

Resolution No. 1 was read by Mr. Leaverton and moved for adoption; Frank Hayden seconded, and it was adopted as read.

Resolution No. 2 was read by Mr. Leaverton, moved for adoption; seconded by Mr. Hull, and carried.

Resolution No. 3 was read by Mr. Leaverton, moved for adoption; seconded by Mr. Rayner and carried.

Resolution No. 4 was read by Mr. Leaverton, moved for adoption; seconded by Mr. Don Smith and carried.

Resolution No. 5 was read by Mr. Leaverton, moved for adoption; seconded by Mrs. Edwin Fry and carried.

Resolution No. 6 was read by Mr. Leaverton, moved for adoption; seconded by Mr. McCue and carried.

Resolution No. 7 was read by Mr. Leaverton, moved for adoption; seconded by Mr. King and carried.

Resolution No. 8 was read by Mr. Leaverton, moved for adoption; seconded by Mr. Swaninger and carried.

After discussion No. 9 was amended by inserting "intentionally" before "take" in the second line, and adding at the end "and any other synthetic product using coloring matter as an imitation for real butter."

Resolution No. 9 was then passed as amended.

Resolution No. 10 was read by Mr. Leaverton, moved for adoption; seconded by Mrs. Fry and passed.

Resolution No. 11 was read by Mr. Leaverton, moved for adoption; seconded by Mr. Townsend and carried.

DR. SHERMANTINE: That last phrase "out of the mud" is not a very good advertisement for the State.

MR. WEAGLY: But it is the truth.

Resolution No. 12 was read by Mr. Leaverton, moved for adoption; seconded by Mr. McCue and passed.

Resolution No. 13 was read by Mr. Leaverton, moved for adoption; seconded by Don Smith and carried.

Resolution No. 14 was read by Mr. Leaverton, moved for adoption; seconded by Mr. Townsend and carried.

Resolution No. 15 was read by Mr. Leaverton, moved for adoption; seconded and carried with one vote against, the opposition being as to the uncertainty of the word "gift." It was explained that this meant \$1,700,000 and perhaps up to \$8,000,000 later.

Mr. Hogue moved that the amount be inserted, or the word "financial" be placed before "gift."

DR. SYMONS: I think the insertion of the amount of \$1,700,000 might cover your objection. He expects to do some more, but at present that is a gift to the University for establishing a school of aeronautics—research, development in the whole business of aeronautics.

It was decided to insert "of \$1,700,000" after "gift" in No. 15.

Mr. Leaverton read Resolution No. 16 and moved its adoption. It was seconded and after some discussion No. 16 was amended by adding "in establishing the Glenn L. Martin School of Aeronautics Engineering at the University of Maryland" after "help" in the second sentence. Mr. King seconded its passage as amended and it was carried.

Mr. Leaverton read Resolution No. 17 and moved its adoption. Mr. Townsend seconded the motion and it was carried.

Mr. Leaverton read Resolution No. 18, and moved its adoption. After it was seconded there was some discussion that the word "governmental" should be placed before "agencies" in the third line. Mr. Wise told the group that the word had been in the original resolution. The resolution was finally passed with the word "governmental" inserted.

Resolution No. 19 was read by Mr. Leaverton, moved for adoption, seconded by Mr. Don Smith and carried.

Resolution No. 20 was read by Mr. Leaverton, moved for adoption, seconded by Mr. Colona and carried.

Resolution No. 21 was read by Mr. Leaverton, moved for adoption, seconded by Mr. Hull and carried.

Resolution No. 22 was read by Mr. Leaverton, moved for adoption, seconded by Mr. Townsend and carried.

Resolution No. 23 was read by Mr. Leaverton, moved for adoption, seconded by Mr. Hanson and carried.

MR. NUTTLE: Does that mean that one from the F. F. A., one from the Girls 4-H and one from the Boys 4-H?

ANSWER: Yes.

MR. NUTTLE: Then I am heartily in favor of it.

Resolution No. 24 was read by Mr. Leaverton, moved for adoption, seconded by Mr. McCue and carried.

MR. WEAGLEY: I should just like to suggest that if this report is read some years later, it will seem that only Mr. Townsend, Mr. McCue and Don Smith were here. I would like to hear some others seconding these motions.

Resolution No. 25 was read, seconded by Edgar Williams and passed.

Resolution No. 26 was read by Mr. Leaverton, moved for adoption by him, and seconded by Carl Smith, Jr.

MR. NUTTLE: Things are moving along too smoothly, we might just as well have a little discussion here. Several people have come to me about this resolution, especially the people around Baltimore. There are some canners on the Shore who contract for more than they can handle, and that is what this resolution is hitting at, but I do think this resolution hits farther than it is intended to hit. There are some conditions down on the Shore that should be corrected. I do not at this time have any amendment, I know what the people who brought this resolution in wanted. I would like to move that we defer action on this resolution until later.

MR. WINTERBERG: I would like to say that we have trouble in our county about this. The field man for the cannery draws up the contract and when the trucks come in, the cannery is over-loaded, they have not the canning capacity to take care of their contract. Some of the trucks have to stay there 14 to 16 hours before they are unloaded, and while the contract price might be \$92, they would not get \$60 for their loads,—they would only get one-third of what they thought they should get.

MR. WEAGLEY: I think we should defer action on this resolution at this time, and I will appoint a committee of Mr. Nuttle and two others to bring in a corrected second paragraph.

Resolution No. 27 was read by Mr. Leaverton, moved for adoption, seconded by Mr. Claude Phillips.

There was opposition by Mr. Todd and Mr. Townsend to the word "watermelon" alone and the third and fourth lines were amended: after "our" as follows: "risks are comparable, and urge that when ceilings are proposed, the officers of the Maryland Farm Bureau, etc." Resolution passed as amended.

Resolution No. 28 was read by Mr. Leaverton and moved for adoption, seconded by Mr. Morris and carried.

Resolution No. 29 was read by Mr. Leaverton and moved for adoption, seconded by Mr. Mann and carried.

Resolution No. 30 was read by Mr. Leaverton and moved for adoption, seconded by Mr. Burke and carried.

Resolution No. 31 was read by Mr. Leaverton and moved for adoption, seconded by Mr. Williams and Mr. Colona, and carried.

Resolution No. 32 was read by Mr. Leaverton and moved for adoption.

MR. MANN: I think that should be changed to "bought through a dealer," but not confined to the disposal through dealers.

MR. FUNK: How are you going to dispose of it if not through dealers? The Government cannot deal with all these farmers.

MR. MANN: I do not wish to eliminate the dealers. I want to favor them. I suppose it will have to be sold through dealers.

MR. KEENAN: At the present time I have information on trucks for sale,—we have been trying to get them sold direct to the farmers, but they will not sell except through dealers. There is a law that requires that all Government material be sold through dealers. That only adds to our cost.

MR. HOGUE: Why could that not be taken care of through the Farm Bureau?

MR. KEENAN: Down at Camp Meade the farmers could not buy direct, they had to go back and get a dealer to buy for them; that only wasted time and cost the farmer more.

The farmer had to go back to Somerset County and get the dealer himself.

MR. McCUE: When that law was enacted and put into effect, they thought they would give the dealers a chance to live and let live. The Government thought at that time it was the proper way to dispose of the goods through a source that was familiar with the operation, and their business had been much affected by the discontinuance of the

sale of new goods, and so the Government thought it better to deal through the dealers than to the farmers direct. The idea is all right. I don't think we should expect to cut the dealers out entirely.

MR. SPESSARD: I am interested in trucks but there are lots of surplus material other than trucks,—for instance there was a lot of 6,000 wheel barrows placed on the market. If we go on record here as objecting to dealers having anything to do with this surplus, how can we get a single wheel barrow? We want to buy at the wholesale price for the farmer, but when we try to limit the means of distribution to a single farmer or a farmer cooperative, the Government never would be able to dispose of the surplus war material. I think most of us will remember that leather company that purchased leather goods from the Government after the last war. Those men were indicted by the Federal Grand Jury for violating the Federal Law. They were acquitted, but they made a lot of money out of that. We want to express our views and our national officers are certainly going to fight for a chance to give the farmer a right to buy individually, and if that statute is taken off the books requiring that these goods be sold only through dealers we will have accomplished our purpose.

MR. CLAUDE PHILLIPS: We want to give the farmers the right to buy.

MR. WEAGLY: And not be confined solely to dealers. That could be taken care of by the amendment.

Amendment was read as follows, after "speculators" in fourth line,—
"and sales not be made solely by dealers."

MR. LORD: Bill Evans here tells me that they are setting up agencies that farmers will get a square deal, putting them on that committee working with the dealers. I don't know whether that would work or not.

Resolution passed as amended.

Resolution No. 33 was read by Mr. Leaverton and moved for adoption. Don Moore seconded the motion and it was carried.

Resolution No. 34 was read by Mr. Leaverton and moved for adoption. Mr. Rayner seconded the motion and it was carried.

Mr. Nuttle announced that he was ready to present the amendment to Resolution No. 26 as follows: Second paragraph "We deplore this unfair treatment and urge that the War Food Administration in certifying canners consider among other factors the volume of acreage contracted in relation to its plant capacity at the peak of the season, and the ability of the canner to unload the farmer in a reasonable length of time. We further feel that the contracted acreage is the canner's first obligation."

Resolution No. 26 was passed as amended.

Mr. Rayner presented the following resolution (Resolution 2) and moved its adoption, the motion was seconded by Carl Smith, Jr., and passed as No. 35.

MR. RAYNER: The reason that this resolution was passed by the Vegetable Growers is that it is so very difficult to get an interpretation of any regulation from the O. P. A. Our experience is that after it is issued there are 24 hours before it becomes effective, and the State officers have never been notified that the regulation is in effect. There is no authority to make any interpretations. It is entirely up to the State office, and we go to the State office and they do not know such an order is in effect, and naturally cannot interpret it. It is a terrible mess, to say the least. Mr. Rayner offered No. 36 resolution and moved its adoption. Mr. Townsend seconded the motion.

After a short discussion it was amended and passed.

DR. SYMONS: I was requested yesterday by a number of the associations in the State to consider the matter of water pollution. I understand that this group, which represents quite a representative group of farmers, had a conference with Governor O'Connor. One of the issues put up to us in the last week was the effort to prevent the Calvert Distillery Company, or rather to help them in the matter of the pollution of the Patapsco River. An effort is being made for the Committee to allow them to purchase a machine to help in this. We understand that as much as \$4,000,000 worth of food is going down the Patapsco. We are hopeful that we can get the machine to try and conserve that food. This Association has been interested in the pollution of streams throughout the State. My suggestion is that we refer this matter to the Board to study the matter and report. This is not a resolution, merely a suggestion from me.

Resolutions were offered on Poultry Regulations and Pullorum Control, seconded by Mr. Holloway and Mrs. Kern and passed as No. 38 and No. 39.

MR. KING: I have a short motion. I move that the actions of the Board of Directors as contained in the minutes of their proceedings since the last corporation meeting be and are hereby approved and ratified. Motion seconded and carried.

Resolution No. 37, regarding Stamp Tax Recommendation was offered, seconded and carried.

MR. WEAGLY: I am now going to ask Mrs. Kern to present the resolutions of the Associated Women.

Mrs. Kern read the resolutions and moved their adoption.

Mrs. Dorsey seconded the motion and it was carried.

MR. HEAPS: I wanted to second that too. That is a splendid thing, we share with the ladies,—that resolution commands the attention of this body.

MR. WEAGLY: We always accept their resolutions in the entirety.

MR. NUTTLE: I want to call your attention to the fact that we have always had a resolution for rural electrification before. I want you all to know that we will be ready, the initial work has been done, and we can extend the lines just as soon as it is feasible to do the work. We want every farmer to have rural electrification.

Mr. Weagly called Mr. Nuttle to the chair to conduct the election.

Mr. Nuttle called for the report of the Nominating Committee.

The Nominating Committee nominated Mr. Weagly for President for the coming year.

There was a motion that the nominations be closed and the Secretary cast the vote of the body as a whole for Mr. Weagly for President.

Mr. Hayden seconded the motion and it was carried, and Mr. Wise cast the vote, and declared Mr. Weagly elected President for the ensuing year.

MR. WEAGLY: All I can say is that I appreciate your cooperation and help during the past two years, and hope during this coming year we will be able to make 1945 an outstanding year. In closing, I want to thank you again and again and again.

Mr. Wise reported that the Nominating Committee had nominated Mr. Howard Leaverton for Vice-President.

Mr. Townsend moved the nominations be closed, and that the Secretary be instructed to cast the ballot for Mr. Leaverton.

Motion seconded and carried and Mr. Wise cast the ballot for Mr. Leaverton as Vice-President for the ensuing year.

MR. LEAVERTON: I appreciate this very much. I only want to put emphasis on what I said this time a year ago. I am willing to help in every way I can. I hope I can be of some help in 1945. Thank you.

Claude Phillips moved that the resolutions be adopted as a whole. Mr. McCue seconded the motion and it was carried.

Next on the program being Confirmation of Directors. Mr. Heaps read the list of directors and moved that the list be accepted as a whole for the ensuing year. This motion was seconded.

MR. WEAGLY: Before that is carried, I want to say this. If any man had to get off the National Board because my wife was elected to it, I am sorry that it had to be Harry Nuttle. I doubt if there is a man in

this whole State who would have done it as gracefully as Harry Nuttle did. Mr. Heaps nominated Harry Nuttle as Honorary Director of the Maryland Farm Bureau for the coming year.

Jim King seconded the motion and the entire slate was elected.

MARYLAND FARM BUREAU BOARD DIRECTORS 1945

Farm Bureau

R. C. F. Weagly, President.....	Hagerstown, Md.
Howard Leaverton, Vice-President.....	Rock Hall, Md.
C. E. Wise, Jr., Secretary-Treasurer.....	Baltimore, Md.
Harry Barton	Pinto, Md.
Arthur Jones	Arnold, Md.
F. Ridgely Todd.....	Sparrows Point, Md.
John C. Ward	Paris, Md.
C. J. Kern	Denton, Md.
C. Jesse Hull	Westminster, Md.
D. B. McDowell.....	Nottingham, Penn.
Walter W. Bowling	Newport, Md.
Sam Linthicum.....	Cambridge, Md. R. No. 3
James E. Ferrell.....	Knoxville, Md.
T. S. Anderson	Frederick, Md.
Wm. Winterberg	Grantsville, Md.
Wilson A. Heaps	Pylesville, Md.
J. Wilson Lord	Ellicott City, Md.
James D. King.....	Germantown, Md.
Harold C. Townshend.....	Upper Marlboro, Md., Box 95
John W. Smith.....	Sudlersville, Md.
F. D. Hayden	Great Mills, Md.
Harry Keenan	Westover, Md.
Francis A. Schwaninger.....	Easton, Md.
D. Eldred Rinehart.....	Smithsburg, Md.
Claude C. Phillips	Quantico, Md.
Letcher L. Colona.....	Pocomoke City, Md.
P. C. Turner	Baltimore, Md.
Mrs. C. J. Kern.....	Denton, Md.
Mrs. Randall Spoerlein.....	New Windsor, Md.
Mrs. R. C. F. Weagly.....	Hagerstown, Md.

Affiliated Members

Dr. T. B. Symons, Dean of College.....	University of Md.
Dr. H. C. Byrd, President of College.....	University of Md.
R. W. Shermantine (Md. Co-Op Milk Producers)	810 Fidelity Bldg., Baltimore 1, Md.
Edwin Warfield, Jr., (Crop Improvement) (Hillsboro- Queen Anne Co-Op)	Woodbine, Md.
Marshall T. Heaps (Horticultural).....	Cardiff, Md.

J. W. Snoddy (Poultry) _____ Riverdale, Md.
 J. Herbert Snyder (Stockmen) _____ Union Bridge, Md.
 J. E. McCue (Tobacco) _____ Tobacco Growers Ass'n., Baltimore 2, Md.
 Homer S. Kemp (Nurserymen) _____ Princess Anne, Md.
 George H. Strattman (Vegetable) _____ Sparrows Point, Md.
 Janon Fisher, Jr., (Horsebreeders) _____ Ecclestone, Md.
 E. N. Cory (State Beekeepers) _____ University of Md., College Park, Md.

Associated Women

Mrs. Lloyd Shaw
 Mrs. P. D. Brown
 Mrs. Atlee Armour
 Mrs. Forde Adams
 Mrs. Ralph Shockley

Honorary Members

T. Roy Brookes _____ Bel Air, Md.
 H. H. Nuttle _____ Denton, Md.
 Jos. H. Blandford _____ University of Md., College Park, Md.
 Mrs. John Flook _____ Boonsboro, Md.

MR. NUTTLE: I feel right foolish. I have given a lot of time to the Farm Bureau, and not only in this State. I did not want to get off the Board of the American Farm Bureau. Maybe I can still do you some good. I am not quitting, I am still one of you. I appreciate this honor a lot. I am going to be as active as before. I am here all the time and anything I can do I will be glad to do.

Mr. Weagly called for a motion to adjourn the meeting of the Maryland Farm Bureau.

Mr. Rinehart moved for adjourning, Mr. Colona seconded the motion and it was carried.

ANNUAL MEETING MARYLAND AGRICULTURAL SOCIETY LORD BALTIMORE HOTEL, JANUARY 12, 1945

Mr. Weagly called the Maryland Agricultural Society into session.

MR. WISE: In order to save time, may we have a motion that the delegates here present for the Maryland Farm Bureau also are delegates for the Maryland Agricultural Society?

Motion made, seconded and carried.

Council of Agricultural Society of Maryland

Allegany Co.: Harry Barton, Mrs. Mabel White, Albert O'Neal; *Anne Arundel*: Arthur Jones, Albert W. Taylor, Jr., Frank Wimmer, Jr.; *Baltimore*: F. Ridgely Todd, W. W. Boyce, T. A. Mann; *Calvert*: J. C. Ward, J. B. Morsell, Estep Watson; *Caroline*: C. J. Kern, F. D. Zeigler,

H. M. Harris; *Carroll*: C. J. Hull, Edwin A. Englar, Raymond Buchman; *Cecil*: D. B. McDowell, J. S. Reisler, S. W. Caldwell; *Charles*: W. W. Bowling, Eloise Gardiner, S. C. Linton; *Dorchester*: Sam Linthicum, Reginald Jones, John Luthy; *Frederick*: James E. Ferrell, T. S. Anderson, R. C. W. Schaffer; *Garrett*: Wm. Winterberg, Charlie B. Miller, R. C. Turney; *Harford*: Wilson A. Heaps, A. G. Ensor, T. Roy Brookes; *Howard*: J. W. Lord, G. Cashell Nichols, Willis Cissel; *Kent*: H. S. Leaverton, Frank O. Sutton; *Montgomery*: J. D. King, Mrs. Ed. Fry, G. Rust Canby; *Prince George*: Harold S. Townshend, Clara Ann King, Wm. E. Duvall, Sr.; *Queen Anne*: J. W. Smith, W. T. Thomas, John T. Meredith; *St. Mary's*, F. D. Hayden, Mrs. Elizabeth Russell, F. Compton Hurd; *Somerset*: Harry Keenan, J. Miles Lankford, Harry Twining; *Talbot*: Francis A. Schwaninger, Lola M. Blades, Percy A. Shortall; *Washington*: D. Eldred Rinehart, Wm. Hovermale, Denton Jacques; *Worcester*: Letcher L. Colona, Lester D. Shockley, R. N. Stagg; *Md. Crop Improvement Assn.*: Willis L. Cissel, Albin O. Kuhn, Edwin Warfield, Jr.; *Md. Cooperative Milk Producers, Inc.*: C. M. Merryman, R. G. Fitez, John L. Hersh; *Hillsboro-Queen Anne Co-Op. Corp.*: Edwin Warfield, Jr., O. Bunting, Chas. I. Boyle; *Md. State Horticultural Society*: Dwight T. Walker, A. F. Vierheller, D. E. Rinehart; *Md. State Poultry Council*: J. W. Snoddy, Wade H. Rice, C. E. Ritter; *Md. Stockmen's Assn.*: U. G. Bee, J. K. Funk; *Md. Tobacco Growers Assn.*: C. C. Lee, T. W. James, J. E. McCue; *Md. Vegetable Growers' Assn.*: J. E. Andrews, W. R. Ballard, Egbert Hawkins; *Md. Nurserymen's Assn.*: H. S. Kemp, Paul A. Hoffmann, Daniel B. Stoner; *Associated Women*: Mrs. C. J. Kern, Mrs. Randall Spoerlein, Mrs. John Flook; *Md. State Horse Breeders' Assn.*: Janon Fisher, Jr., G. L. Stryker, Humphrey S. Finney.

Mr. Wise read the minutes of the preceding session, which were duly accepted.

December 12, 1944

TO COUNTY SECRETARIES AND AFFILIATE
AND ASSOCIATE SECRETARIES

Notice of Annual Meeting of the Executive
Council of the Maryland Agricultural Society

Dear Sir:

The annual meeting of the Executive Council of the Maryland Agricultural Society will be held January 12, 1945, at 11:30 a. m., Lord Baltimore Hotel, Baltimore, Md.

Blanks are enclosed for you to submit the credentials for the council members of your organization.

Very truly yours,
C. E. WISE, JR.
Secretary

CEW:MD
Enc.

MD. AGRICULTURAL SOCIETY

Dr. Symons presented a financial statement and copies were distributed among the delegates.

FINANCIAL STATEMENT—JULY 1, 1943-JUNE 30, 1944

Appropriation _____			\$2,265.00
Expenditures: --			
Date	Payee	Classification	Expended
1943			
July 31	Md. Farm Bureau, Inc.	Travel (Pres., etc.) _____	\$118.03
	Advertisers' Engraving Co.	Printing (Annual Report) _____	13.69
	Joseph Murray	Exhibit (Balt. Co.) _____	25.00
	Ethel R. Richards	Exhibit (Balt. Co.) _____	20.00
	Gloria Myers	Exhibit (Balt. Co.) _____	20.00
	Md. Farm Bureau, Inc.	Office Rent (July) _____	53.33
Sept. 24	Md. Farm Bureau, Inc.	Office Rent (Aug., Sept.) _____	106.66
Oct. 30	Md. Farm Bureau, Inc.	Office Rent (Oct.) _____	53.33
Nov. 16	Md. Farm Bureau, Inc.	Franchise Tax _____	10.00
	Md. Farm Bureau, Inc.	Office Rent (Nov.) _____	53.33
Dec. 4	K. G. Connolly	Travel (Farm Meeting) _____	18.46
1944	Md. Farm Bureau, Inc.	Office Rent (Dec.) _____	53.33
Jan. 25	K. G. Connolly	Travel (Farm Bur. Meeting) _____	12.42
	L. S. Dodson	Travel (Farm Bur. Meeting) _____	9.54
	E. R. Shank	Travel (Farm Bur. Meeting) _____	13.80
	J. M. Smith	Travel (Farm Bur. Meeting) _____	1.75
	Maxine Wirth	Travel (Farm Bur. Meeting) _____	17.41
	M. T. Johnson	Postage _____	80.00
	Md. Farm Bureau, Inc.	Office Rent (Jan.) _____	53.33
Feb. 12	W. S. Hough	Travel (State Hort. Meeting) _____	4.81
	J. W. Merchant	Travel (Farm Bur. Meeting) _____	27.17
	A. G. Waller	Travel (Farm Bur. Meeting) _____	12.85
	Md. Farm Bureau, Inc.	Office Rent (Feb.) _____	53.33
Mar. 15	Kingsville Nurseries	Exhibit _____	10.00
	Md. Farm Bureau, Inc.	Office Rent (March) _____	53.33
Apr. 26	French-Bray Printing Co.	Printing (Grange Annual Report) _____	153.82
	Md. Farm Bureau, Inc.	Office Rent (April) _____	53.33
May 29	M. T. Johnson	Postage _____	80.00
	Md. Farm Bureau, Inc.	Office Rent (May) _____	53.33
June 5	Park Display Co.	Exhibit (4-H Club) _____	80.00
	Md. Farm Bureau, Inc.	Office Rent (June) _____	53.37
June 22	A. F. Vierheller	Travel (State Hort.) _____	63.76
	Alpha Photo Eng. Co.	Printing (Annual Report) _____	4.70
	Maurice Leeser Co.	Printing (War-time Programs) _____	27.79
	Maurice Leeser Co.	Printing (Annual Report) _____	800.00
Total Expenditures _____			\$2,265.00

This account is audited by the State Auditor.

It was announced that Mrs. Weagly being a member of the American Farm Bureau is also a member of the Board of the Maryland Farm Bureau.

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A motion was made, seconded and carried that the same officers be continued for the coming year. Officers reelected—R. C. F. Weagly, President; H. S. Leaverton, Vice-President; C. E. Wise, Jr., Secretary; T. B. Symons, Treasurer.

The meeting was thereupon adjourned, upon motion, duly seconded and carried.

RESOLUTIONS, 1945 MARYLAND FARM BUREAU, INC.

Foreword

Three years ago we pledged ourselves to the victory that must be won on both the battle and home fronts. Today we feel that we are much nearer victory, but we reiterate our previous pledge and shall not cease to fight until the victory and peace are won.

Maryland farmers have exceeded previous high levels in production in the face of greater manpower shortages on the farm. They have not had all the necessary machinery needed to do this job which has required many more than eight hours a day, yet the job was done without too much bickering and without slow-down or strikes.

Agriculture has and will continue to use its all-out efforts to produce the food and fibre needed, asking only an equitable sharing of the burdens placed by War-time restrictions.

We will cooperate to bring this war to a successful conclusion and will use our organized strength in the post-war period to complement business, industry and labor in the fight for full employment and national prosperity.

Farm Labor

1. An adequate manpower on the farms is the most vital factor in the production of food which is so necessary in successfully prosecuting the war.

Farmers and their families have responded patriotically with long and arduous hours of labor to the nation's call for greater food production. They produced a record acreage of crops and livestock despite the handicaps of various wartime shortages.

Farmers greatly deplore the danger to the war effort inherent in strikes of organized labor. They also deplore the haphazard prices of OPA which prevent farmers from adequately competing with industry for labor.

During 1944, Maryland farm products were harvested and processed with a minimum of spoilage. This was due in large part to the wonderful success of the Extension Service in handling the difficult assignment for the farm labor program.

1945 presents another challenge. With seasonable weather, to obtain needed food production, adequate labor will be imperative.

To accomplish this end, we recommend:

1. In line with our historic record of advocating work or fight legislation, we vigorously support the efforts of the national administration, Congress and the Selective Service to achieve more stringent control of manpower, especially those in 4-F to the end that they either work where assigned by their Selective Service Boards or be inducted for military service.
2. Equitable prices for farm products so farmers can compete with industry for labor.
3. The AFBF be commended for its successful efforts to re-enact legislation and appropriation for the operation of the farm labor program by the Extension Service.
4. Greatest possible exchange of labor and labor-saving machinery between farms and the fullest possible use of school children, volunteer labor from towns and cities, penal labor, conscientious objectors and other similar labor for farm work.
5. That more foreign labor, more war prisoners and more interstate labor be provided.
6. For all the above types of labor, especially war prisoners, farmers be given first call during the growing and harvesting season.
7. That more Prisoner of War Camps be constructed in areas of great need for farm labor and that such construction costs be borne by the War Department.
8. Cooperation in every possible manner with the USES in providing adequate labor for canning factories.
9. Every effort be made to provide employment on farms for men with an agriculture background returning from the armed services.
10. The state and county labor committees continue to function in an advisory capacity for all agencies and to investigate for state and county Selective Service Boards which have been very sympathetic with farmers needs and most cooperative in deferring essential farm labor.
11. That careful thought be given to the post-war set-up for farm labor which would insure sympathetic consideration of the farmers' point of view and a coordinated agricultural program in the county.
12. The efforts of all agencies and organizations who have cooperated in the farm labor problem be commended.

Labor Relations

2. Agriculture recognizes its responsibility to help preserve national economic stability. This cannot be achieved until agriculture, industry and labor each recognizes the rights of the others and their mutual interdependence.

We have no quarrel with the rank and file of labor. We recognize their right to organize and to work for legitimate betterment of their economic and social conditions.

However, we deplore and protest the actions of some labor leaders who, by fomenting strikes and threats of strikes, have disrupted national unity and threatened the war effort.

We likewise deplore the efforts of organized labor to obtain by political action domination over the economic life of the nation.

Therefore, we recommend that representatives of agriculture, labor and industry sit down around the council table to repair their strained relations and to achieve greater unity in the interests of an early winning of the war and to build a sound foundation for post-war prosperity.

We will fully support the Interstate Farmers Council in protecting every farmer-owned and farmer-controlled organization from interference by any non-farmer group.

Marketing Facilities in Baltimore

3. In view of the antiquated and congested conditions in the Baltimore wholesale fruit and vegetable markets, we reaffirm our belief that the Maryland Farm Bureau go on record as favoring the construction of a consolidated wholesale fruit and vegetable market in Baltimore. Such a market would eliminate extra handling and cartage costs from one market to the other at a saving of from \$750,000 to \$1,000,000 annually. In addition to the saving in costs, it is estimated that the improvements in the market would reduce materially the time now consumed by farmers in delivering their produce to the Baltimore markets. We heartily commend the report of the Commission submitted to the Governor and urge that its recommendations be favorably considered by the present General Assembly.

Farm Machinery and Supplies

4. We strongly urge that the W.P.B. use every effort to provide adequate farm machinery, repairs, and supplies to enable farmers to meet their production goals in 1945.

Government on a Pay-As-You-Go-Basis

5. Our national debt now approximates 70% of the total personal and public wealth of the nation. Indications are that there will be in-

creased pressure for large appropriations for numerous Governmental Bureaus and Agencies even during the war.

We urge our Congressmen and Senators to do everything in their power to put our National Government on a pay-as-you-go basis, as soon as possible.

Agricultural Cooperatives

6. Agricultural Cooperatives are a form of private enterprise which enables the farmer to correct his long-standing disadvantage of selling at wholesale and buying at retail. It is a means by which the farmer, who has a small volume of business, can join with others in a voluntary self-help effort, to improve his bargaining position in the market, to improve the quality of his product, and to raise his level of living.

Experience has demonstrated that agricultural cooperatives through which savings are returned to the member, are an effective type of business organization, because this narrows margins between producers and consumers, enable producers to secure more money for their products, and consumers to get better products for the same money.

We urge a more general utilization of Agricultural Cooperatives be encouraged as a benefit to the agricultural and national economy and welfare.

We also protest the efforts of the National Tax Equality Association to destroy cooperatives through unjust means of taxation.

Perishable Products

7. We urge that State legislation be passed to protect the transportation and handling of perishable foods while being delivered or distributed by farmers or agencies employed by farmers.

Crop Insurance

8. We believe in the principle of crop insurance on a self-sustaining basis. We believe that a special State Committee should be set up by farm organizations to study this important question so that our representatives in Congress may be advised as to the attitude of our farmers in this matter.

Oleomargine and Nutrition

9. Farmers are naturally sympathetic to the promotion of nutrition among all people. We know that oleomargarine cannot take the place of butter. We, therefore, protest any movement in Congress to change the taxing system on this synthetic product and any other synthetic product using coloring matter as an imitation for real butter.

Day-Light Saving Time

10. We wish to go on record as opposing day-light saving time because of the imposed hardships in farm operations.

Farms to Market Roads

11. Governor O'Connor has announced a \$60,000,000 (long-time) road program for Maryland. Farm to market and farm service roads in many sections of our state have been sadly neglected. We urge that this be given consideration and that an equitable share of these funds be apportioned to farm to market roads to get our farmers out of the mud.

Social Security

12. Social Security for farmers and farm laborers is under consideration by the administration. We believe the time will come when agricultural workers will demand the benefits of old-age retirement and urge our members to study this question for future action.

Soil Erosion and Conservation Program

13. We particularly urge the further development of soil and water conservation in Maryland. With the formation of 19 soil conservation districts created under the provisions of the State Law passed in 1937, splendid progress has been made by the cooperating agencies. Eighteen of the 23 counties in the state are now included in soil conservation districts. We urge the Congress to maintain the identity of the Soil Conservation Service as a distinct administrative unit of the Department of Agriculture. We further urge that federal appropriations for the work be increased. We endorse the request for an increase in state funds to promote this work. We urge Farm Bureau members in these respective districts to take an active interest in promoting all phases of soil and water conservation.

In Relation to the State Board of Natural Resources

14. The Farm Bureau is glad to cooperate with the Board of Natural Resources as demonstrated at the Conservation Forum. Recent approaches have indicated the choice of desired interests to have our agricultural interests and soil conservation representatives made a member of this board. We believe that such action is unnecessary. We are satisfied with the administration of soil conservation work in the state and can see no advantage to be gained for the state by such legislation. The problem of soil and water conservation is so large and important that our first concern is that this work continue unhampered under the control and administration of our agricultural interests.

University of Maryland

15. We heartily commend Glenn L. Martin for his generous gift of \$1,700,000 to the University of Maryland for the great development of aeronautics at the Institution. We believe that the further development of research in this important means of transportation at our State Uni-

versity will be of substantial aid to agriculture. This gift together with further support from the state will place our University as the center and leader in the East in this important science. Mr. Martin has made it possible to develop education and research in this science as he has demonstrated his marvelous ability in the manufacture of airplanes and bombers to aid the war effort as well as contribute largely to the improvement of airplane transportation at the great Glenn L. Martin plant at Baltimore.

Post-War Construction and Development

16. We commend Governor O'Connor and the Commission on Post-War construction and development for their great interest and support in allocating funds in the Post-War construction period to provide necessary buildings and equipment at the University of Maryland. We likewise appreciate his cooperation and generous help toward assisting in establishing the Glenn L. Martin School of Aeronautical Engineering at the University of Maryland. We trust that the forth-coming state budget will adequately provide equipment and maintenance provisions for the many lines of service to the state and our people that the University provides.

Agricultural Engineering

17. We recommend that necessary funds be provided this department of the University of Maryland to adequately serve farmers in the practical use of new types of Farm Machinery, construction of proper tenant houses, efficient but economical repairs to farm homes and buildings and other functions of this department.

Farm Credit

18. The Farm Credit Administration has served agriculture well in financing land purchases, farm operations and cooperative activities. We recommend that all governmental agencies offering loans to agriculture be coordinated under the Farm Credit Administration in the interest of economy and efficiency.

State Taxation

19. We reaffirm our support of the Maryland tax program of luxury commodity taxes and an income tax which has produced needed revenue for state functions. We recommend that the state income tax rates be restored to those in force prior to reductions made by the legislature in 1943. This action is necessary to insure construction of the program to eliminate the state real estate levy and to provide additional funds for the post-war period and to meet the educational and other needs of the state.

Federal Taxation

20. The Federal income tax forms which farmers must make their reports on are too complicated and need to be simplified. We urge that a single form be designed to replace the two now required of farmers.

Present high rates are necessary in war time but will prove burdensome in the post-war period and retard business activity. We recommend that rates be lowered as soon as possible when peace comes to leave revenue for the states and to stimulate business. We believe it is better to have taxes too low rather than too high in the reconstruction period.

Subsidies

21. Since the income of many consumers is at an all-time high, while they spend for food the lowest percentage of income ever recorded in the history of our nation, most organized farmers are opposed to accepting subsidies from the government when they should be allowed to receive fair prices in the market place.

Through this consumer subsidy system of our government the national debt will be materially increased and much of it will need to be paid by our returning boys who are fighting and receiving a very meager sum compared to the wages of labor.

We reaffirm our unalterable opposition to subsidies instead of fair prices in the market place.

We, therefore, petition Congress to use every rightful method to rectify this inflationary program.

State Fair and Community Exhibits Funds

22. We commend the State Fair Board and Maryland Agricultural Society for their assistance and financial support to State Fair and Community Educational Exhibits and urge the present General Assembly to provide a continuance of the funds for this very important work.

Rural Youth

23. We realize that our youth on the farms today will be the farmers of tomorrow. We feel that in the interest of a better agriculture in Maryland they should be acquainted with the problems and encouraged to assist in their solution.

We instruct the Board of Directors of the Maryland Farm Bureau to accept the State organizations of F.F.A. and 4-H Clubs as affiliated members of the Maryland Farm Bureau without fee. Such action will entitle each of these groups to one non-voting director on the board of the Maryland Farm Bureau, Inc.

National Agricultural Policy

24. The Maryland Farm Bureau is impressed with the forward looking statement on National agricultural policy by the committee of eighteen of the Association of Land-Grant Colleges. We subscribe whole-

heartedly to the fundamental approach to the economic and social problems enunciated in this report, and recommend that all farm bureau members read the report carefully.

Post-War Planning

25. The state committee and eighteen sub-committees on Post-War planning have prepared a sound program for the development of Maryland Agriculture. We endorse the principles and philosophy of these reports and urge our members to cooperate in the working out of the respective programs.

Delivery of Canning Crops

26. Due to the shortage of efficient man power and the critical need the farmer has for all means of transportation at his disposal in getting his fruit and vegetables to the canning factories, often making it necessary that the grower go to the factory himself, situations have prevailed in the past where the farmer stood in line all day and into the night getting one load of his vegetables unloaded. Many times it was necessary for him to go home and come back the next day. The long delay deteriorated the quality of his fruit and vegetables and the spoilage at home, by being unable to get unloaded, runs into several hundred dollars.

We deplore this unfair treatment and urge that the W.F.A. in certifying canners consider, among other factors, the volume of acreage contracted in relation to plant capacity at the peak of the season, and the ability of the canner to unload the farmer in a reasonable length of time. We further feel that the contracted acreage is the canner's first obligation.

Ceilings on Fresh Fruits and Vegetables

27. We feel that we should have the same ceilings for fresh fruit and vegetable growers in this state as in the South, as our labor and production costs are just as high and our risks are comparable and urge that when ceilings are proposed, the officers of the Maryland Farm Bureau contact other State Farm Bureaus in same area and call in grower representation from each state affected and see if adjustment cannot be made immediately.

Truck Crops

28. We strongly urge that before the State War Board sets goals and certification prices for processing crops the commodity groups in this state be consulted.

That produce sold on a pound basis in public market for processing be weighed on public scales or by a licensed weighmaster on certified scales and that the weight be accepted by both parties as a basis for settlement.

Artificial Insemination

29. Dairymen of Maryland have expressed an interest for the improvement of the dairy herds in the state through the method of artificial

insemination involving the use of outstanding dairy sires. A committee of leading dairymen have studied the practicability of this method and have recommended to the University Agricultural Advisory Council the adoption of the method and support of the University in a program of research, extension education and supervision; we urge that the Farm Bureau lend its support to the University and the Extension Service in this project.

A.A.A.

30. We agree in general with the purposes and principles of A.A.A., but feel that for the most good to the greatest number of farmers, their work should be correlated with all other publicly supported agencies in the counties to the end that there will be unified administration and more economic and practical operation of the program.

Tydings Amendment

31. We commend Senator Millard E. Tydings for his foresight in sponsoring the Tydings Amendment and that he be urged to safeguard its provisions in connection with recent manpower directive designed to increase inductions of farm laborers into the armed forces, and also in connection with proposed legislation for a draft of men in 4-F classification.

Surplus War Material Disposal

32. An enormous amount of war material will be surplus when the war ends. Much of this will be usable in agricultural production. Farmers should be given first consideration in its distribution. We insist that the war surplus materials be kept out of the hands of speculators, that sales not be confined solely to dealers, and that every precaution be taken to insure the widest and most equitable distribution of surplus war materials to farmers at fair prices.

Tobacco Experiment Appropriation

33. We strongly urge the passage of an item in the University of Maryland budget calling for \$25,000 for the purpose of establishing a State owned and operated tobacco experimental farm.

We further urge that a necessary portion of this amount be utilized for the purpose of suitable land and equipment.

Horticultural Appropriation

34. The Maryland State Horticultural Society recognizes that an emergency exists in the fruit growing industry by virtue of reduced quality and production, due largely, at present, to the codling moth menace, but primarily to nutritional disturbances and diseases.

This Society requests that a horticultural field laboratory, with proper facilities, be established in Western Maryland to handle the problems of the fruit growing industry.

This would include the services of well-trained men, including one horticulturist, and one entomologist, with sufficient funds allotted for travel and supplies with which to solve field problems. Suitable laboratory space should be rented to include facilities for inspection, and spray residue analysis.

We, therefore, request that a minimum of \$15,000 be appropriated for these services.

O.P.A. Information

We endorse the following Resolution passed by Maryland Vegetable Growers Association and Horticultural Council:

35. The Maryland Vegetable Growers Association goes on record and suggests that the Farm Bureau do likewise and demand that O.P.A. establish some central office with authority to issue prompt interpretation on all orders and regulations affecting the fruit and vegetable industries, as this type of produce is highly perishable and delay causes waste and monetary loss.

Price Control

We endorse the following Resolution passed and adopted by Maryland Vegetable Growers Association:

36. The Maryland Vegetable Growers Association goes on record as supporting the general theory of the O.P.A. on prevention of inflation and holding down general retail prices, but to be in line, the Association goes on record asking that general labor wages should likewise be held down to preserve fair monetary values for the loyal and patriotic men and women returning from our Armed Forces during the necessary readjustment and rehabilitation period.

Auto Stamp Tax

37. We recommend that the Federal motor vehicle use stamp tax be abolished.

Pullorum Control

38. Standards have been raised in pullorum testing work with a view toward eradicating pullorum from our breeding flocks in Maryland.

Funds now available are insufficient to achieve the desirable objective.

The Maryland Farm Bureau requests the Governor to increase the appropriation for pullorum testing work to the sum of \$20,000 annually.

Egg Marketing Law Funds

39. There has been a suspension of activities in the administration of the Maryland Fresh Egg Law. The present appropriation of \$7,500 is inadequate to properly enforce the law which is of such vital importance to poultry producers; therefore, an appropriation of \$10,000 is requested to properly administer the Maryland Fresh Egg Law and the Egg Sizing Law and it is requested that these appropriations be used only for the purposes for which they are designated.

In Memorium

40. We regret very much the loss of our able leader W. T. Chaffey, former president of the Somerset County Farm Bureau. The contributions made to our agricultural program in Maryland by him have been numerous and we take this opportunity to extend our sympathy to Mrs. Chaffey and the family.

Appreciation

41. We wish to express our hearty appreciation to all those who have made the program of the 29th Annual Meeting of the Maryland Agricultural Society and Maryland Farm Bureau an outstanding success, especially do we recognize the contributions made by E. A. O'Neal, president of the American Farm Bureau Federation, Miss Dorothy Emerson, State Girls Club leader, Donald McKnight, 4-H Club boy and Anne Lee Tipton, 4-H Club girl, Major J. B. Corns, Col. John J. Powers, O. H. Hoffman, Jr., H. C. Byrd, John Gontrum, Mr. and Mrs. Randall, T. B. Symons and Mayor T. R. McKeldin.

We realize the long hours and hard work involved in the preparation and operation of our convention and we commend President Weagly, Secretary Wise and the Staff for their efforts in making this convention a success.

We are grateful to the management of the Lord Baltimore Hotel for their splendid facilities and courtesies.

RESOLUTIONS ADOPTED BY THE ASSOCIATED WOMEN OF THE MARYLAND FARM BUREAU

January 10, 1945

While our united nations are winning the war, women on the home front must hold fast to the faith of our fathers, cherish the ideals of our democracy and strive for higher spiritual, intellectual and physical values to cope with the emergencies beyond the present crisis. Farm women must assume their share of responsibility in the protection and perpetuation of these historic institutions.

We, the Associated Women of the Maryland Farm Bureau, representing over 8,744 active members and meeting in annual convention, do hereby go on record as favoring the following resolutions:

1. Believing the fulfillment of our American ideals will depend to a great degree upon a high standard of public education and that many of our rural children are penalized by inadequacies of our present school system, do hereby resolve to support the proposed 5-point program for improving education in Maryland as sponsored by the Maryland Congress of Parents and Teachers, the State Department of Education, the State Teachers' Association, and endorsed by His Excellency, the Honorable Herbert R. O'Connor. The program includes these points:

1. A 12-year system all over the State, instead of 11 years now given in 20 of the 23 counties.
2. A reduction in size of classes. Maryland ranks 47th out of 48 states in this respect.
3. A revision of teachers' salary schedule.
4. Attract more students to the teaching profession by eliminating the tuition to State Teachers' Colleges.
5. Improved libraries—both public and school.

2. The American home is the foundation of our faith and ideals and must be preserved at any cost. The home is still the basic unit of society and it is in the home where we inculcate the fundamental ideals of character and the customs and traditions of American life. The future world depends upon the high ideals of Christian homes. We appeal to farm women within our respective communities to develop practical and effective services in befriending and counseling of youth.

3. Religions united in cooperative endeavor demonstrate to the world that religion is the unifying force we claim it to be. Our religious forces must be willing to work together for the rebuilding of faith in God as the common denominator in world construction. Greater emphasis should be placed upon the larger part the rural church must play in our national life and in the winning and maintenance of a just and abiding peace. We urge all farm women to accept the challenge to maintain and strengthen the rural church.

4. We reaffirm our long-time position on the health problems of Rural America. We also lend our support to the Federal program for the control of venereal disease.

5. We approve the resolution as adopted by the Associated Women of the American Farm Bureau Federation in opposition to compulsory military training.

6. We recommend a study of the Equal Rights Amendment and suggest that sufficient material be made available to the Associated Women.

7. We reaffirm the resolutions adopted in previous annual meetings that are now in force.

In Memoriam

The Associated Women of the Farm Bureau in Wicomico County, having seven months ago suffered the loss of one of its most valued and enthusiastic members, Mrs. Joseph H. Parker, wishes to offer the following resolution. Be it resolved:

That in the passing from our midst on June 1, 1944, of our dear member, Mrs. Joseph H. Parker, we have lost one of our most enthusiastic and valued members, interested and active in every phase of our association. We wish to go on record in expressing our deep appreciation of

her strong Christian character, her good judgment, her friendly manner, with ever ready sympathy for all who needed it, making her companionship a joy to her many friends and acquaintances and her personality of inexpressible value to her community. She will ever be remembered gratefully by those who knew her or who came under her influence in her many activities.

Be it further resolved:

That the secretary be asked to incorporate this resolution in the minutes of this meeting and a copy be sent to the Maryland Farm Bureau News Letter and one also be sent to the husband of Mrs. Joseph H. Parker.

MINUTES
OF THE
Seventh Annual Meeting
OF THE
Associated Women
Maryland Farm Bureau, Inc.

January 10, 1945

Mrs. C. J. Kern, President, presided. Following group singing of "America" and "God Bless America," and the Pledge of Allegiance to the Flag, led by Mrs. Randall Spoerlein, an impressive devotional service was in charge of Mrs. P. D. Brown.

Mrs. Kern brought greetings to the group and clearly told about county reports. She explained the amounts given to the Clubmobile and China Relief by the counties. This gift is entirely voluntary on the part of the counties and the amount given by the State as a unit is the important part, but it is hoped that all counties will participate in the giving. She thanked all directors, chairmen, and State Fieldmen for their splendid cooperation in effecting the state organization. She closed her address with the last paragraph from her annual report, as follows: "The past year of service as State President of the Associated Women of Maryland Farm Bureau will linger in memory always as one of the most interesting and delightful years of my life. Maryland has hosts of fine people as Farm Bureau leaders from Garrett County in the extreme west to Somerset County on the southern tip of the Shore. It has been my privilege to visit practically all of the 23 counties, helping with organization work, holding district meetings, and attending annuals and banquets, where I have been received most cordially and extended the finest hospitality. Traveling over the State has been a real education for I have learned much of its geography, climate, and crops, which I had only known through reading. It has been a most worthwhile experience to me personally, and I trust my services have been helpful to Farm Bureau."

The President called for reading of the minutes by the Secretary. It was moved, seconded and passed that these be accepted.

Mr. R. C. F. Weagley, President of the Maryland Farm Bureau, brought greetings from that organization. He gave a report of the mem-

bership campaign and expressed his pleasure at the report of the leading project of the Associated women, which was membership work.

Roll call of counties by Mrs. G. W. Sattler, Chairman of the Credentials Committee, showed that all counties but two were represented by delegates.

C. E. Wise, Jr., Secretary-Treasurer of the Maryland Farm Bureau, gave a financial report.

Mrs. Kern explained that the out-going board of directors retained office until after nomination of officers for election. After the election the new board assumed their duties for the following year.

Mrs. John Flook of Washington County was nominated by the board of directors as vice-president for the year 1945. The Delegate Body moved, seconded and passed that the nomination be accepted and Mrs. Flook was elected vice-president.

The following were chosen directors for the several districts: No. 1—Mrs. Lloyd Shaw, Allegany County; No. 2—Mrs. Randall Spoerlein, Carroll County; No. 3—Mrs. P. D. Brown, Charles County; No. 4—Mrs. Atlee Armour, Cecil County; No. 5—Mrs. Forde Adams, Talbot County; No. 6—Mrs. Ralph Shockley, Worcester County.

Selected as delegates for the Friday morning business session of the Farm Bureau were: District No. 1—Mrs. Thomas Culler, Frederick County; No. 2—Mrs. Edwin Fry, Montgomery County; No. 3—Mrs. F. Hayden, St. Mary's County; No. 4—Mrs. Atlee Armour, Cecil County; No. 5—Mrs. Albert Saulsbury, Caroline County; No. 6—Mrs. Edgar Williams, Wicomico County.

County reports, given by all but two counties, were most interesting.

Mrs. Kern told of the splendid work done by the women in getting out the vote at the recent election. She said that 2,000 pamphlets had been placed in the hands of Maryland Farm Bureau members.

The meeting adjourned for luncheon for the delegates.

At the afternoon session, greetings were brought to the Associated Women by the following:

Mrs. Custombater, Chairman of the Associated Women of the State of New Jersey, brought greetings from her State organization.

Miss Ella Luck brought greetings from the Southern States Co-operative.

Miss Venia M. Keller, Assistant Director of the Extension Service, brought greetings from that Service and the University of Maryland.

Mrs. Fred Bull, representative of the Parent-Teachers' Association, brought greetings and told of the five-point program on education as outlined by the Educational Congress and indorsed by the Governor.

Mrs. R. C. F. Weagly, newly elected President of the Associated Women of the American Farm Bureau, brought greetings from the national organization. She then gave a splendid address on "Farm Women Look Ahead." She expressed the new year's wish that this terrible world struggle may cease so that we may give more time to the spiritual values of life.

Mrs. Weagly said: "Farm women have always been a group whose life has been looking ahead. It is necessary to plan to live in a moving world. Home is the center of the farm woman's interest, but ceases to be her horizon. Without homes and family living there can be no democracy. When faith grows cold at home, the church becomes frigid. Farm women are helping to mold public opinion. It isn't what you know, but how well you know what you know. Farm women are mothers to the greater number of our nation's youth.

"The darkest shadow is the one a man makes when he stands in his own light. Farm women, do not stand in your own light by slight misunderstandings with your fellow workers."

Following Mrs. Weagly's address, recollections from the National Institute were given by Mrs. Edgar Williams. The president was asked to send copies of her report to each county.

Mrs. Frank Dorsey gave a report on the National Convention in Chicago.

Mrs. Flook, Chairman of the Resolutions Committee, gave the report. The resolutions were adopted singly and as whole. They are incorporated with the resolutions of the Farm Bureau.

ANNA S. SPOERLEIN, *Secretary.*

Seventh Annual Conference

OF

Maryland State Council

OF

4-H Clubs

January 10, 1945

President Staley Hahn presided at the Seventh Annual Meeting of the Maryland State Council of 4-H Clubs, held on January 10, 1945.

Fifteen counties were represented. The delegates answered roll call with two-minute reports on the subject "The Best Senior Council Meeting Program of 1944."

The Treasurer's report showed a balance of \$66.83.

The purposes of 4-H Mobilization Week were outlined by Milo S. Downey, State 4-H Club Agent. The purposes of that week are:

1. To provide 4-H members an opportunity to check their efforts to date in helping to win the war, with the 4-H goals already set up.
2. To give every member an opportunity to reaffirm his intention of carrying through to completion of his goals, especially those affecting food production, conservation, and health.
3. To encourage every 4-H member to assume responsibility for enrolling at least one new member and helping him to get started in the local 4-H club.
4. To publicize the results of 4-H Club work from the standpoint of the nation, state, county, and local community, so that the general public may be adequately informed regarding the far-reaching importance of 4-H Clubs in helping to win the war.

Suggestions from the floor for the program of 4-H Club work included:

1. A committee in each county to publicize 4-H Club work.
2. Place pamphlet reports of 4-H Club work in convenient places where the public will have the best opportunity to acquire them.

3. Have a National 4-H Sunday in the week of March 3-11.
4. Have a report from each county including both the money value and the personal value of 4-H Club work done.
5. That the 1946 conference include a report of the work done by each county for 1945 National 4-H Club Week.

Program of Education

Mrs. Laura Bull of Harford County presented the five-point program of education for Maryland. The five points are:

1. A 12-year system of education for Maryland.
2. Reduction in the size of classes per teacher.
3. Revision of the teachers' salary schedule.
4. Means of attracting more students into teacher training.
5. Obtain improved school libraries.

Mrs. Bull said that Maryland is seventh in per capita wealth, but ranks forty-seventh among the states in moneys spent for education.

Post-War Planning

A discussion on "Post-War Planning for Older Youth in Maryland" was led by Allie Messer, chairman of the sub-committee on post-war plans for older youth.

Following is a summary of the recommendations made by that sub-committee:

1. That a good, workable guidance program be established for rural youth.
2. That Extension forces be increased to provide more agents particularly qualified to work with rural youth (two per county; one for girls and one for boys).
3. That provision be made for rural youth to have educational opportunities along individual needs and desires; for example, specialized courses of 6-8 weeks in rural communities, evening sessions.
4. That recreation leaders be provided who will train leaders at the community level.
5. That rural youth have representation on all major rural organizations.
6. That farm and home management facilities be increased in the State.
7. That more recognition (not monetary) be given to volunteer leaders who work with rural boys and girls.

8. That patterns of agreement be worked out for father and son partnership, thus providing ownership for sons in event of passing on of the parent.
9. That opportunities be provided for rural people to have public facilities on the same basis as do city people.
10. That special credit facilities be established when things are on a normal basis and we do not have inflated prices, to help worthwhile young people who need a financial start, so they may become farm owners and constructive community leaders.
11. That adults be awakened to the importance of youth to the welfare of this nation and the responsibility leaders have to train youth so they may be ready to assume the direction of community and national activities in the near future.

Dr. T. B. Symons, Director of the Extension Service, after expressing thanks to rural youth for their record in 1944, warned that 1945 will be even more critical and goals will have to be even higher. To accomplish these goals, he offered the following ideas:

1. Continue youth organization. Youth will be called upon to help build the new world.
2. Prepare ourselves to do that job.
3. "The land will make nations great and the land will destroy them." To us comes the job of making that land—though years old—produce the demands of the living.
4. Be more efficient.
5. Present to the Extension Service your thoughts, ideas, and assistance.
6. Encourage community life, because we build people there.
7. Learn to work with people, make friends, and take part in politics, for it is our privilege.

Afternoon Session

The session opened with an accordion duet by Edwin Calary and Ed Scarborough, Council members from Harford County.

Miss Dorothy Emerson, Girls Club Agent, introduced Jo Blake and Becky Groton of Baltimore County, who gave a demonstration on home-made toys. The girls have made a paying hobby out of what started as a small 4-H demonstration at a regular club meeting.

Jean Reese reported on the Western Shore Christmas Party, and Sarah Jane Kerr on the Eastern Shore Christmas Party.

Mayor Theodore R. McKeldin of Baltimore gave an inspiring talk, in which he told of some of his own early experiences. Noting the public speaking contest on the program, he urged the young people to express

themselves well in order to be successful as community leaders for better things.

Vernon Bolte was in charge of the first extemporaneous speaking contest. Mrs. Hester Bell Provensen, "Daddy Jenks," and Dr. Symons were judges.

Blue Ribbon winners were: Merritt Pumphries, Howard County, on "Necessities for Success." Doty Remsberg, Frederick County, on "Farm Youth are Over-Worked." Anna Fike, Talbot County, on "Who Should be Boss in the Family." Eileen Mudd, Prince George's County, on "My Best Teacher." Dick Bennett, Carroll County, on "Youth Needs Friends." Henry Heaps, Harford County, on "The Future of 4-H Work."

Red Ribbon winners were:

Paul Harbaugh, Baltimore County, on "Rural People Need More Recreation." Ada Ford, Allegany County, on "My First Speech." Jean Eskridge, Dorchester County, on "Absence Makes the Heart Grow Fonder." Theodore Redman, Kent County, on "We Need More Music in Our Lives." George Fry, Montgomery County, on "Women's Hats."

Reports on Out-of-State Conferences

Members who represented Maryland gave reports on the meeting of the American Country Life Association at Fredonia, New York, the National 4-H Club Congress in Chicago, and Camp Miniwanca.

Lois Mullinix of Howard County, State Style Revue delegate, was presented a special wool blanket award as one of the five girls chosen in the United States for outstanding work in making and modeling a wool costume.

Officers Elected

The following officers were elected for the coming year: Vernon Bolte, President; Raymond Mueller, Vice-President; Peggy Himes, Secretary-Treasurer.

PROCEEDINGS
OF THE
Maryland State Horticultural Society
FORTY-SEVENTH ANNUAL MEETING
Hagerstown, Maryland
January 3rd and 4th, 1945

The meeting convened at Hotel Alexander, Hagerstown, at 10:00 A. M., January 3, opening with the sound film, "For Years to Come," shown by courtesy of Soil Conservation Service.

NEW FUNGICIDES AND APPLE SCAB CONTROL

**ROBERT H. DAINES, Associate Plant Pathologist, New Jersey Agricultural
Experiment Station, New Brunswick, New Jersey**

For some time we in New Jersey have felt the need for a new fungicide to use in our apple spray schedule. This need arises from the fact that in our area oil is desirable in the second cover spray (14 day), for the destruction of codling moth eggs. Since this is so, our problem has been in locating an effective fungicide for use during the bloom and especially during the first cover sprays that could be used safely preceding or in combination with oil.

Our search for a material that would fill the specifications outlined has extended over a period of 3 to 4 years. During this period several new fungicides have been tested that show considerable promise for use in the spray schedule.

Of the new fungicides used, Fermate alone has been tested sufficiently to be recommended for general use, although two other fungicides (Isothan Q15 and Puratized N5-X) have, during two years' experimentation, given encouraging results as shown in Table I. In our experiments Fermate, without lime, has been very satisfactory for control of scab and Brooks' fruit spot, when used with or without oil in the combination. According to reports, this material cannot be used safely in combination with, or immediately preceding or following Bordeaux mixture. One pound of Fermate seems to be equal to approximately two pounds of lime in preventing arsenical injury from developing. This is very fortunate since lime should be omitted from those sprays in which Fermate is included.

Isothan Q15 and Puratized N5-X have given from fair to excellent control of apple scab. Isothan Q15 seems to be safe for use with oil, whereas in the case of Puratized it is not quite so clear cut. However,

since these two materials have been used, experimentally, with oil in only a few tests, we feel that more work will have to be done before they can be recommended for general use.

APPLE SCAB CONTROL DATA

Materials Used*	Fruit Showing Scab	
	1943	1944
	Per Cent	Per Cent
Lime Sulfur 2-100.....	0.8	2.0
325 Mesh Sulfur, 8 lbs.....	3.9	3.7
3 to 5 Micron Sulfur, 5 lbs.....	2.8	2.9
Fermate, 1 pound.....	5.3	---
Fermate, ½ lb. plus 3 lbs. 3 to 5 Micron Sulfur.....	1.2	3.3
Fermate, 1½ lbs.....	---	4.2
Isothan Q15, 1 gal. in 1,000 gals.....	---	8.2
Puratized N5-X, 1 gal in 1,000 gals.....	---	2.5
Unsprayed Ck.....	99.2	92.6

*Materials applied at the Pink, Petal-Fall and First Cover applications.

Even though the newer materials look promising for use during the "change over period" from sulfur to oil, sulfur will likely continue to be an important ingredient in the pre-bloom and perhaps the petal fall spray applications for many years. Since this is true, it is important that we become acquainted with the limitations of each group, in order to choose more wisely the fungicide to be used.

The grower is occasionally confronted with the problem of deciding which type of sulfur fungicide to use following a wet period that is favorable for scab infection. When wet periods occur and the foliage and fruit are sufficiently protected by fungicides, the problem of fungicide selection is not thereby complicated. However, if such infection periods occur when the susceptible surfaces are not adequately protected the problem of fungicide selection becomes an important one.

During the 1943 growing season an effort was made to determine just how many hours, following a rain, a wettable sulfur could be used successfully for control of apple scab. In this experiment a 3 to 5 micron sulfur used at the rate of 5 pounds per 100 gallons and a 325-mesh sulfur used at the rate of 8 pounds per 100 gallons were applied to Rome trees at two-hour intervals following a heavy downpour of one hour duration. This experiment was conducted at the petal fall period and the trees included in the test had not been sprayed for 10 days,—and then only poorly. The procedure followed in this test was: Three trees were sprayed with the 3 to 5 micron sulfur, and an additional three trees sprayed with a 325-mesh material two hours after the rain began. Two hours later, or four hours after the beginning of the wet period, another group of 6 trees was sprayed.

This test was continued for 14 hours, or until 7 groups of trees had been sprayed with each of the two sulfur fungicides mentioned above. During the period of the test, the temperature varied from 61° to 66° F.,—a very favorable temperature range for the development of apple scab. Two and one-half weeks after the sprays were applied, the foliage was examined for scab spots. This examination revealed that all sprays applied during the first 8 hours following the wet period gave excellent scab control. The application that was made 10 hours after the beginning of the wet period provided only fair control, whereas the 14-hour application gave poor control. Although the length of time following an infection period, when the use of a wettable sulfur will give scab control varies with the temperature, this period should never be less than 8 hours, since this test was conducted when the temperatures were optimum for infection. This fact is borne out by a report from New York made by Mills.

An experiment was conducted in 1939 in which lime-sulfur (2-100) and flotation paste (14-100) were applied to McIntosh trees at 12-hour intervals, following the beginning of a wet period. In this experiment the flotation paste provided moderately poor protection at the 12-hour spray, and poor protection throughout the remainder of the test. Lime-sulfur, however, gave good protection for 48 hours following the beginning of the wet period, but gave moderately poor protection at the 60 and very poor control at the 72-hour period. Even though the effect of varying temperature on this period of protection provided by lime-sulfur is not known at present, it seems safe to assume that there is a considerable period of time after the beginning of a wet period—perhaps 50 hours—when lime sulfur will give good control of apple scab.

With the above facts in mind, one should be able to select more wisely a fungicide to be used for scab control following a wet period. When one is spraying to provide protection against infection that may occur during wet periods not yet experienced, a wettable sulfur will provide such protection and with little danger of injury. However, when one is choosing a fungicide for use following a wet period that occurred when foliage and fruits were not sufficiently covered to afford protection, a wettable sulfur should be used only during the first 8 hours after the beginning of the wet period. Following this period and until approximately 50 hours after the beginning of the wet period, lime-sulfur alone will prevent infection.

QUESTION BOX

Submitted by Growers

1. *How control apple scab in orchards with poor air and water drainage?*

Dr. Daines stated that the spraying of the ground in wet sections of orchard blocks with Elgetol is a good practice, but all of the regular foliage sprays recommended by Spray Service must also be applied.

S. B. Waddell: Don't let scab get ahead of you. Spray thoroughly, and keep the foliage covered all during the critical time between pre-pink to bloom.

2. What is the latest on bitter-rot on apple?

Fulton W. Allen: We use copper sprays as outlined in the Spray Calendar. On Eastern Shore, we have removed any varieties that can not be kept clean of bitter-rot by use of regular sprays. Unless the variety is a very good one, it may not be profitable to apply any extra bitter-rot control sprays.

3. Can apple black-rot be controlled?

Dr. E. A. Walker: Black-rot is easily controlled by use of the sprays recommended in the Spray Calendar, using wettable sulfur, flotation sulfur, or dilute liquid lime-sulfur sprays. It causes most loss on fruit after the fruit is harvested or drops to the ground, and is generally considered as a weak parasite. If often becomes a strong parasite on apple leaves, producing numerous "frog-eye" leaf spots. Orchard sanitation is important in control. Black, mummified apples should be removed and destroyed in dormant season, as they infect leaves in spring. Rot cankered limbs and also branches or twigs killed by fire-blight should be pruned off, as they harbor the disease and cause spring infection. Complete removal of all these infection sources is almost impossible, but pruning is essential to control, along with proper spraying.

4. Is bacterial peach spot on peach increasing? How controlled?

Dr. E. A. Walker: Peach bacterial spot is increasing in some areas, damaging leaves and fruit. Two types of spot occurred during the past 2 years. The small, angular spots, when numerous, may cause fruit cracking. The larger, round spots greatly disfigure the fruit. Some of these spots are deep and gummy, while others are surface spots easily removed by peeling. Elberta, Hale, Halehaven, Sunhigh and several other new varieties show this large spotting more than other varieties. For control, zinc sulfate spray (6 to 8 pounds per 100 gallons of water) is recommended, beginning with Petal-Fall Spray and repeating at 10-day intervals. Weaker zinc sulfate sprays have little control effect. (Colored pictures of the diseased fruit were shown).

J. G. Harrison: On the Shore, the disease seems to be serious on only certain varieties, but especially on high, sandy land. We use the zinc sulfate spray just mentioned, applying it with each spray containing lead arsenate and one spray after the last one in which lead is used.

GROWER EXPERIENCES IN USE OF DE-BLOSSOMING SPRAY AS AN AID IN PEACH AND APPLE THINNING

Discussion led by E. C. McFADDEN

D. T. Walker: Having had the headache of thinning a heavy set of peaches with plenty of labor in normal times, last spring I was confronted with the possibility of having to thin a heavy set of peaches with no sure help in sight. Therefore, we made an attempt to reduce the set of fruit by the use of a specially made wire brush and the use of Elgetol by spraying in the nearly full bloom.

We started by brushing the blossoms off in the pink stage on young trees and worked at that until the trees came into bloom, then we started to spray with Elgetol. Realizing that I might get too much kill, we started on varieties when they were 30% to 40% full-bloom and worked the blocks as they came into bloom. In some blocks we had to skip trees and catch them at another time, as they were not out far enough at that time. We used 1 pint of Elgetol to 100 gal. of water.

I am going to show some slides which were made by my brother for study and reference for further research on thinning the various varieties.

Most of the pictures will be comparisons of the same age tree of the same variety as a check compared to an effort to thin the tree by one means or another.

First, an Elberta 18-year-old not sprayed. The other slide represents a tree adjacent that was sprayed. Note that on the area of the photograph which was sprayed, there were 75 good possible fruit buds.

Next a 6-year-old Elberta in the same orchard that was brushed before we sprayed. It was not sprayed, as we went through spraying the older trees. You will see a fair example of good foliage starting. Also, clumps of peaches which may or may not be best.

Next, the results obtained by spraying a group of 4-year-old Elberta which we did not have time to brush and as their tonnage was not going to be large I sprayed them at 100% full bloom to help their vitality by not having a large set of fruit. Note the foliage. We did not further thin this block, but sold from it the peaches that were 2¼ up.

In spraying, I found one 6-year-old peach tree we had missed in pruning and it was really set for a crop, we caught it at full-bloom and soaked it. The tree had lots of wood and fruit buds. I simply sprayed off the blossoms instead of cutting off the wood. There was a nice set of fruit.

We have never had a freeze-out of Georgia Belle and they always set 3 peaches where there is room for one, so I double-sprayed these few trees, once when they were 30% to 40% out; again when they were full-

bloom. We saved a lot of work here, but still had considerable thinning to do and they were the smallest peaches we had. As you know, the Halehaven normally sets more fruit than it can mature. We tried to eliminate some of the bloom, but our results were not entirely satisfactory, as it so happened that they bloomed at an in-between time and it rained for two days and we could not spray them when I thought they should be sprayed. We had to pull off at least half of the fruit that was left after we sprayed. However, we got the best growth on our Halehaven that we have ever had.

Next, I show two slides of the Dewey-St. John, a variety not yet named or released, but of the same characteristics as the Halehaven. These trees were brush-thinned, only three years old, at the pink stage, but some of the buds were almost dormant and were hard to knock off. Note the foliage and size. Where they were thinned enough, they made $2\frac{1}{4}$ inches and high color. Notice the groups that were left.

Last I will show where we brushed all rows except one of 3-year July Elberta which were set very heavy. Note good foliage on brushed trees and the lack of leaves on tree in row as a check. All cultural methods were identical. The peaches on the thinned trees made 2 to $2\frac{1}{4}$ inches. The check row, which was hand-thinned after the June drop, made $1\frac{1}{4}$ inch peaches.

S. M. Fulton: In 1943 we sprayed 900 York and 200 Transparent apple trees in full-bloom, using Elgetol $1\frac{1}{2}$ pints per 100 gallons of water, applying it with guns equipped with No. 7 disks at 600 to 700 pounds pressure. We took off too many blossoms on the lower parts of the trees and not enough on the upper parts. In 1944, we used spray brooms with smaller disks and lower pressure and removed at least one-half the blossoms and lightened the hand-thinning job. The foliage was burned, but not as much as with the guns, and the leaves soon came back in good shape. With the export trade gone, larger Yorks are needed for domestic markets. In 1945, all heavy-set Yorks and Transparents will be sprayed, and we hope to get the fruit hand-thinned afterward. In general, our checks have shown only slightly decreased tonnage, possibly 10%, but the fruits were larger. For good results, keep the spray guns moving to get coverage and avoid too much burning.

F. W. Allen: We use $\frac{1}{2}$ of a quart of Elgetol per 100 gallons of water. In 1943, considerable russetting occurred on some varieties, especially Golden Delicious. We are afraid to use the spray on Stayman, Jonathan, and Delicious, but it has given good results on Transparent. Spray was applied with a Speed Sprayer, and may be not as selective in coverage as hand spraying.

E. W. Scott: We sprayed Stayman and Wealthy with good results. Let me warn you to spray the tree tops well, and plan for some follow-up hand-thinning. We used $\frac{1}{2}$ of a quart of Elgetol per 100 gallons on Stayman and $\frac{1}{4}$ of a quart on Wealthy, using a broom and fine nozzles.

On a Stayman block that seemed to be so light in buds that it would be a loss to take care of the crop, we sprayed heavily to take off all bloom, but it did not work. The foliage was badly burned, but evidently the trees did not suffer, as there is a good set of buds for 1945.

D. T. Walker: I mentioned the use of a special wire brush for brushing off the peach buds. This works fine in Georgia with different type of trees from our trees. I do not consider the brush as too practical, as the brushing is done before the frost hazard, and if a freeze follows, we risk the loss of the entire crop.

QUESTION BOX

Submitted by Growers

1. *What is a good fire-blight control?*

S. B. Waddell: I have used a spray in wide-open, full-bloom on susceptible varieties such as Jonathan and York, but not on Grimes or other varieties that russet easily. I used Bordeaux Mixture composed of 4 pounds bluestone, 4 pounds lime and 100 gallons of water. If the weather turns warm at spraying time, use 8 pounds of lime, instead of 4 pounds.

2. *How seriously do oils affect leaf functions?*

Edwin Gould: Summer oils may affect leaf functions somewhat, depending upon tree vigor, weather, temperature, etc. Oils may affect or weaken fungicides, but we must use oil and take good or bad effects. We don't know how much oil is required to injure a tree, but probably 3 gallons total per tree per season is a safe margin. In other words, 3 quarts of oil in 4 or 5 sprays is safe, but late oil sprays will complicate the residue question. I have used 8 oil sprays per season with some injury resulting.

3. *Is there a practical control for leaf hopper?*

C. Graham: The answer is mostly "No." There are three species of leaf hoppers, each with 4 broods. They are active from petal-fall through the season. Use nicotine in first cover spray and about August add nicotine to the regular codling moth sprays, if hoppers are numerous. Hoppers are controlled only before the young insects begin to fly. Dr. Porter states that in some DDT plots there seemed to be some degree of control of leaf hopper.

4. *Is peach drying equipment practical?*

A. L. Schrader: This equipment is in limited use in sections where the dew remains on peaches late in the morning, delaying picking. The equipment is costly and has only limited times of use. A practical method of drying used by one Eastern Shore grower is to pick the fruit and allow the crates to set under the trees in the orchard until the fruit is sufficiently dry to run over the grader.

Afternoon Session

The afternoon session was opened by invocation delivered by Reverend Paul M. Robinson, Church of the Brethren, Hagerstown.

PRESIDENT'S ADDRESS

DWIGHT T. WALKER, Mt. Airy, Maryland

LADIES AND GENTLEMEN:

I want the members of the Maryland Horticultural Society to know that it has been a pleasure for me to serve you during the past year. It has been a pleasure because of the cooperation of our Secretary; the committees I have appointed; the members at large with whom I have had correspondence; and the cooperation of the various agencies of the University of Maryland.

We all realize that these are not normal times and we cannot expect normal results from our efforts; however, I sincerely believe that we have before us a future that will be successful only as we furnish materials to construct it. By materials, I mean plans. What plans are we now making that will fit into the picture of fruit growing in the future? It is true that we cannot accurately predict all of the future problems that will confront the fruit grower; however, we can make some plans that we think will have a direct effect on the industry.

I am sure that every fruit grower present has in mind some plan that he wants to exploit in the future. Maybe it is a new planting, a cold storage plant, or maybe, a radical change in packaging. However, good the individual plan, it will have very little effect or influence on the fruit growing industry as a whole. I do have in mind a plan that should have a direct effect on the future industry; one which every grower should and can have a part in promoting. This plan is the active promotion and support of the fruit growers' organizations.

We can now realize the benefits to be derived from being represented nationally under present emergency conditions and we may be confronted in the not too distant future with an emergency as important to the fruit growing industry as is the present one. Therefore, in conclusion, I would ask that every member plan to actively support our local organization. Join and cooperate with the affiliate organizations who will work with the national organizations to provide for the fruit grower a future which will assure him that his individual plans have not been made in vain.

REPORT OF THE SECRETARY-TREASURER

ALBERT F. VIERHELLER, College, Park, Maryland

Last year, this Society strongly urged by resolution the formation of a National Horticultural Council composed of representatives from

the various fruit growing industries of the country. This Council would act as spokesman for the industries, especially in matters pertaining to national or international quotas, exports, etc. It is good to report that a meeting has been called in Chicago to form such a Council. Your Society had a voice in urging the calling of this meeting.

Resolutions passed last year were sent to the parties concerned and acknowledgements were received.

President Walker appointed a State Apple Industry Committee and also a Peach Industry Committee to act on any matters pertaining to these industries within the State. These Committees did good work, especially the Peach Committee under Stanley W. Fulton, as Chairman. With these Committees your Secretary has done some work on behalf of National Peach Council and Appalachian Apple Service.

There has been considerable correspondence, mainly in connection with orchard labor draft status, package and materials supplies, and orchard labor.

In cooperation with members of the Horticultural Department staff, University of Maryland, your Secretary has assisted in compiling production cost data for apples, peaches and raspberries for use at OPA price ceiling hearings. Also, several conferences have been attended, among which were those pertaining to outlets for under-sized, drought-injured apples, hurricane damaged-fruit, and discussions of ceiling prices, etc.

Five Maryland Fruit Grower issues have been published with News-Letters in the intervening months; also, your Secretary has contributed State items to American Fruit Grower Magazine for which our members receive the magazine gratis.

I thank the officers and Executive Committee for their fine co-operation, and ask each member to get a new member. In times ahead we may have to be strongly united to get those things to which we are entitled or to keep our industry in healthy condition.

As Treasurer, I report a balance of \$502.00 with several bills payable outstanding and ask that a Committee be appointed to audit the books.

COMMITTEE APPOINTMENTS

President Walker appointed the following Committees:

Nominating—S. M. Fulton, Chairman; G. W. Gardenhour, W. C. Main.

Resolutions—J. A. Cohill, Chairman; E. D. McCain, E. C. McFadden.

Auditing—D. E. Rinehart, Chairman; R. C. Shaw.

NEW INSECTICIDES FOR CODLING MOTH CONTROL

B. A. PORTER, Bureau of Entomology and Plant Quarantine, Agricultural Research Administration, United States Department of Agriculture, Washington, D. C.

In practically all apple-growing sections, the trend in codling moth control for many years has been toward more applications of lead arsenate per season, the use of more gallons per tree and more pounds per 100 gallons, the use of deposit-building mixtures, and sometimes the addition of oil and nicotine. The machinery for applying has been steadily improved, especially with relation to volume and speed. As a result of these factors, apple orchards now receive more lead arsenate than ever before. One might expect that these developments have been accompanied by improvement in codling moth control, but such has not always been the case. In many orchards, in areas where conditions are favorable to the pest, the application of 8 or 10 cover sprays in the course of a season has not always been adequate for satisfactory control; 20 percent or more of the fruit has been seriously damaged. Such conditions are especially common in certain parts of the Northwest, the lower Ohio and Mississippi Valleys, and along the Middle Atlantic coastal plain. During the past 2 or 3 years the codling moth has caused abnormally severe losses in many orchards in the East and Middle West. A brief discussion of the causes of this condition may be of interest.

The codling moth thrives best in a hot, dry climate, where the growing season is long. In hot, dry weather the moths lay the greatest possible number of eggs, and the young "worms," or larvae, are unusually vigorous and move almost directly into the fruit. In cool, wet weather, on the other hand, the moths lay fewer eggs. The worms that hatch are comparatively low in vigor, spend more time on the surface of the fruit before entering it, and are more readily killed by lead arsenate.

Hot and dry weather has prevailed in many eastern and midwestern orchards during the past 2 or 3 seasons, and as a result infestations have reached the highest levels in history. Since these tremendous increases were brought about to a large extent by seasonal conditions, they can be reversed another season if the weather becomes cold and wet during critical periods in the development of the insect. From the standpoint of codling moth control a cold, wet season would be a blessing to fruit growers.

The increase in codling moth abundance has not, however, been due entirely to seasonal conditions. Undoubtedly, there has existed for

many years a trend toward greater abundance and increased difficulty in control. A few of the factors that seem to have contributed to this long-time trend will be mentioned briefly. Many of the orchard practices followed by commercial growers have incidentally contributed to this trend. Improved varieties and cultural methods have to a certain extent eliminated the biennial-bearing habit that characterized many of the older apple varieties and automatically held the population of the insect at a low point. The more regular fruiting and the growing of apples in large, continuous blocks have aided the codling moth by giving it a continuous and abundant supply of food. The benefits derived from extensive use of insecticides have undoubtedly been offset to some extent by their unfavorable effect on the abundance and activities of parasites and predators of the codling moth.

The factors just outlined, however, are not sufficient to explain the marked increases that have developed in the ability of the codling moth to thrive in the presence of heavy deposits of lead arsenate. Some change seems to be taking place in the insect itself, which is modifying its ability to enter fruit in the presence of a poison.

The most extensive study that has thrown light on this problem has been carried on by W. S. Hough, of the Winchester field laboratory of the Virginia Agricultural Experiment Station. His earliest work included comparisons of codling moth from the vicinity of Grand Junction, Colo., where the insect had become notoriously difficult to control, with moths from Virginia, where control was much easier.

Dr. Hough showed that 15 to 40 percent or more of the newly-hatched larvae from Colorado moths were able to enter fruit heavily sprayed with lead arsenate, whereas the proportion of native Virginia larvae entering similarly sprayed apples was usually less than 5 percent. This difference persisted through 14 or more generations reared in the insectary under Virginia conditions. Hough later found that larvae from Virginia orchards having a history of intensive spray programs were able to enter sprayed fruit in much greater proportion than the larvae from unsprayed or poorly-sprayed orchards. Strains from various Virginia orchards that were fed on sprayed fruit through successive generations in the insectary showed increased ability to enter sprayed fruit. L. F. Steiner, and associates of the Federal laboratory at Vincennes, Ind., have found similar wide differences in codling moth taken from different orchards in the Ohio Valley. Both these workers believe that the different strains have been developed by the elimination of the larvae that have the least ability to enter sprayed fruit.

All this discussion leads to a conclusion that has already been obvious to many apple growers—that there is a definite need for a more effective poison than lead arsenate. The need for a new material also exists because of the residue problem. Because of this need, a search for a more

satisfactory insecticide has been under way for at least 20 years. A review of these efforts reveals a large number of failures, a few limited successes, and preliminary indications of a highly effective new material.

Laboratory tests of thousands of possible insecticides have been made by my own organization, the Bureau of Entomology and Plant Quarantine, and similar efforts have been made by various State experiment stations and insecticide companies. Out of every 100 new materials tested in the laboratory 99 are found to have comparatively little effect on the codling moth, and of the few materials that pass the initial tests many are eliminated in the first field experiments. For instance, one material, found to be very poisonous to the insect in the laboratory, took the leaves and apples off the trees in the first field test, and was, of course, promptly crossed off the list. Mention will be made of a few of the materials that have survived the preliminary testing, and that have found limited application in practical codling moth control.

Among the compounds suggested 15 or 20 years ago were a number of non-lead arsenicals. Although such materials would still be objectionable from the standpoint of spray residue, the elimination of lead would be a distinct gain. The most important of the non-lead arsenicals is calcium arsenate. Although this material contains a third more arsenic than lead arsenate, it is much less poisonous to the codling moth. Under some conditions calcium arsenate is also very injurious to apple foliage. Its use is therefore restricted to a few areas in which the codling moth is rather readily controlled, and where experience has indicated that the danger of foliage injury is not very serious.

Several fluorine compounds have given good control of the codling moth in certain localities. The most consistently favorable results have been obtained with cryolite, in the Pacific Northwest, in the course of work carried on by the Bureau of Entomology and Plant Quarantine, and a million pounds or more of this material are now being used there annually. In the East and Middle West cryolite has been found unreliable for codling moth control and sometimes it has been injurious to the apples. As a result, this material is used very little in mid-western or eastern orchards.

Nicotine has come into the codling moth control picture rather extensively in certain localities, especially in the lower Ohio and Mississippi Valleys. Although nicotine is much more expensive than lead arsenate, pound for pound, it is at least ten times as poisonous to the insect. In the field the effectiveness of nicotine or nicotine sulfate is lost soon after application, since the nicotine volatilizes rapidly and also washes off with rains. These disadvantages have been overcome in part by the development of so-called fixed nicotines, of which nicotine bentonite, either prepared in the tank or factory-processed, is the leading mixture. Nicotine bentonite, in the development of which the Bureau of Entomology and Plant Quarantine has played an important part, has been used very

effectively in hundreds of acres of apple orchards in southern Indiana and to some extent elsewhere. Unfortunately, further expansion in the use of nicotine mixtures is hardly possible at the present time because of a current shortage of nicotine.

Until recently, phenothiazine under certain conditions appeared to be as effective as any material that had been developed for codling moth control. At first, this organic compound gave irregular results, although outstanding control was obtained in certain early Bureau tests in the Pacific Northwest. Much of the early irregularity was overcome by securing a standardized material of a very small particle size. In spite of the high degree of control given by phenothiazine, its general adoption has been prevented by certain serious disadvantages. One of the serious difficulties is the effect it has on the spray operators and other persons who work with the material. With certain susceptible individuals, phenothiazine produces a serious skin condition similar to severe sunburn. It is also rather expensive, but the cost would not prevent its use under present conditions if it were entirely satisfactory otherwise. Harold Steiner, of the Arendtsville Field laboratory of the Pennsylvania Agricultural Experiment Station, has secured good results with mixtures of lead arsenate and phenothiazine, both at reduced strengths. In 1945, this mixture will probably be used by a few growers on an experimental basis.

Xanthone is another material which has shown some promise for codling moth control, especially in the Northwest, and it has been adopted by growers to a limited extent.

We now come to DDT, a remarkable new insecticide that has been very much publicized. Many incredible stories about this material are being circulated, but some of these tales have a definite factual basis. The name "DDT" is used to designate an organic chemical that has a complicated name — "N2,2-bis(parachlorophenyl-1,1,1-trichloroethane)." A shorter general name, which includes DDT and several related compounds, is "dichloro-diphenyl-trichloroethane." As this name is too cumbersome for everyday use, the material has been referred to for some time as DDT, an abbreviation consisting of the first letters of the three parts of the shorter name mentioned.

Although DDT has been known as a chemical compound for 70 years, it was only a few years ago that it was tested against fruit insects in Europe, and only about 2 years ago that its value for insecticidal purposes was realized in this country. Thus far, it has been used primarily for the control of insects that transmit diseases to human beings, in connection with the military activities of this country and its allies. Small quantities of DDT, however, have been made available for experimentation in the control of pests of farm crops. In 1943, the quantities available were extremely limited, and the tests were of a preliminary nature. In 1944, more extensive experiments were carried on against the codling moth and many other insects.

In all the experiments carried on by the Bureau of Entomology and Plant Quarantine, DDT has given much better control of the codling moth than lead arsenate. In many experiments 1 pound of DDT in 100 gallons of spray material has been found much more effective than 3 or 4 pounds of lead arsenate. Because of the outstanding promise offered by DDT, it is only natural that many growers would like to use the material on all or part of their acreage in 1945. This is particularly true of growers who have suffered serious losses due to the codling moth. Before adopting this material several factors should be considered.

In the first place, experience with DDT has, after all, been very limited. Late in 1942, when the material was first investigated by Department workers, not more than 200 pounds were in existence in the United States. The tests on the codling moth in 1943 were limited to probably less than 100 trees. In 1944, the tests were carried on in many more orchards, involving more trees, but most of the tests were very limited in scope. With any new materials several years of extensive testing under a variety of conditions are necessary before we can be sure how it will behave.

The possible danger from toxic spray residues, from the standpoint of the consumer, has not yet been determined; considerable time will be needed for studies on the effect of frequent ingestion of small proportions of DDT residues on the human body. If removal is found necessary, further work must be done to develop effective removal or fruit-washing methods.

Probably the most serious difficulty in the use of DDT will be its effect on beneficial insects. In many of the experiments in apple orchards, various species of mites have become excessively abundant on the treated trees. In the Northwest the woolly apple aphid has also become extremely abundant in trees sprayed with DDT. In all cases the increase in mites or woolly aphids is assumed to be due to the effect of DDT on parasites or predators that partly control these insects, but more complete proof is needed. These observations also raise the question as to what DDT may do to bees and other pollinating insects if the material should come into general use. In apple orchards, of course, the applications will not be made until the bees are through working in the blossoms; even then there might be an unfavorable effect on them because of the poisoning of the bloom of cover crops or weeds.

The foliage on apple trees sprayed with DDT has been in very poor condition—bronzed, with extensive dead or dry areas, and with rather severe defoliation. Extensive dropping of fruit has occurred and in certain cases there has also been a reduction in fruit size. These conditions are attributed chiefly to the excessive mite population, but they may have been caused directly by the insecticide, perhaps accentuated by the weakening of the foliage by the mites. With these possible excep-

tions, the danger of injury to fruit trees does not appear serious. Final judgment cannot be made, however, until we find out what effect the accumulations of DDT in soil may have on trees or cover crops.

Much work remains to be done with the formulation of DDT for use in spraying. Different mixtures have been used by different workers, but no standard mixture has yet been worked out.

Even if the work with DDT had reached a point where it could be recommended for use in codling moth control, there is no assurance that the material would be available for general use in 1945. Certain of the basic compounds used in producing DDT are critical war materials and have been released for the production of DDT for war purposes only. Military needs have also thus far absorbed the entire output of DDT except for the small quantities for experimental work. The War Production Board must, of necessity, give priority to the war needs for DDT for use in the control of insects that transmit diseases such as malaria and typhus, which in previous wars often killed more soldiers than enemy bullets or bombs. The diversion of DDT from essential military use would cost the lives of many American boys.

In view of the factors just outlined, Maryland growers would do well to plan on continuing the use of lead arsenate, supplemented in some cases by nicotine and oil, for the 1945 season. Wherever labor conditions permit, various accessory measures, such as banding and orchard sanitation, should be used in dealing with severe infestations.

I have purposely refrained from outlining a detailed program of codling moth control; this can be done much better by Dr. Cory, Dr. Graham, and others who are thoroughly familiar with your conditions.

CODLING MOTH CONTROL BY DDT SPRAYS AT CORDOVA, MARYLAND IN 1944

CASTILLO GRAHAM, Extension Entomologist, Department of Entomology,
University of Maryland, College Park, Maryland

A block of trees in an apple orchard located at Cordova, Maryland, was selected for tests against codling moth with DDT and compared with the standard spray of lead arsenate, oil and nicotine. The DDT used was Gesarol AK 20 spray which contained 20% GNZ-A-DDT supplied by the Geigy Company, Inc., of New York. The amount of material listed in the sprays represents pounds of actual DDT. The block consisted of five acres of ten-year old trees of Stayman Winesap, Red Starking and Grimes Golden, which were partly surrounded by a block of old trees that for the past several years have had from 50 to 80 percent of the fruit injured by codling moth, even though a heavy spray program consisting of lead arsenate, nicotine and oil had been practiced. The block selected for the tests had a 40% crop in 1943 which showed close to 100 percent of the fruit injured by codling moth

with about 80 percent wormy. In that year the entire orchard received seven lead arsenate sprays, three of which had one pint of nicotine sulfate and one gallon of summer oil added per 100 gallons.

Eight rows were selected for the experiment, each of which contained 12 trees; six Stayman, three Starking and three Grimes. Records were taken on all the apples (including drops from one tree of each variety from each row); 34,321 Stayman, 18,690 Starking and 38,770 Grimes, a total of 91,790. All sprays were applied by the grower with a machine that gave about 500 pounds pressure; about 12 gallons of spray were applied per tree per application. Lead arsenate was used at the rate of 3 pounds per 100 gallons of spray, unless otherwise stated. Rows 1 and 8 were treated with the standard spray consisting of seven lead arsenate sprays with one pint of nicotine sulfate and one gallon of summer oil added to the 2nd, 3rd, 6th and 7th covers.

Row 1 was located on one side of the DDT block and separated from it by one buffer row with the standard spray. Row 8 was on the opposite side of the DDT plot and also separated from it by a buffer row; it was treated exactly as Row 1 as to the spray schedule. Row 2 received lead arsenate in the first five sprays with 1 pint of Black Leaf 40 and one gallon of summer oil added to the 2nd and 3rd cover sprays. DDT, 1 pound plus three ounces of sodium lauryl sulfate per 100 gallons was used in the 6th and 7th cover sprays. Row 3 received lead arsenate in the petal fall spray and DDT $1\frac{1}{2}$ pounds plus 3 oz. of sodium lauryl sulfate per 100 gallons in six sprays. Row 4 received lead arsenate in the petal fall spray and 1 pound of DDT plus 3 oz. of sodium lauryl sulfate per 100 gallons in six sprays. Row 5 received 1 pound DDT plus 3 oz. of sodium lauryl sulfate per 100 gallons in the petal fall and in five cover sprays. (Through a misunderstanding the 1st cover was omitted.) Row 6 received lead arsenate in the petal fall and $\frac{1}{2}$ pound DDT plus 3 oz. of sodium lauryl sulfate per 100 gallons in six sprays. The last sprays on all rows were applied July 25. The materials used, the average percentage of worms, stings and clean fruit for all varieties and DDT in grains per pound of fruit on the Grimes trees are shown in Table I.

TABLE I

A Comparison of Codling Moth Control With Different Strengths of DDT and With Other Insecticides

Row No.	Material Used	No. Apples Examined	% Worms	% Stings	% Worms & Stings	% Clean Fruit	DDT gr/lb.
1&8	3 lb. lead in 7 sprays plus nicotine & oil in 2, 3, 6, 7 covers.	22,187	24.6	13.1	37.7	62.3	-----
2	3 lb. lead in first five sprays plus oil & nicotine in 2 & 3 covers. 1 lb. DDT in 6th and 7th covers.	11,968	17.3	6.5	23.8	76.2	.030
3	3 lb. lead in petal fall, 1½ lbs of DDT in other six sprays.	10,572	14.3	3.1	17.4	82.6	.060
4	3 lb. lead in petal fall, 1 lb. DDT in other 6 sprays.	12,626	24.2	3.9	28.1	71.9	.032
5	1 lb. DDT in petal fall (skipped first cover spray). 1 lb. DDT starting with 2nd cover for 5 sprays.	12,694	24.1	4.6	28.7	71.3	.035
6	3 lb. lead in petal fall, ½ lb. DDT in other 6 sprays.	9,663	41.0	5.1	46.1	53.8	.022
7	3 lb. lead in petal fall, ½ lb. DDT plus 1 lb. lead in other 6 sprays.	12,000	27.7	4.3	32.0	68.0	.021

All trees in the orchard where the tests were run had a full crop of apples. Past experience with standard sprays has shown that the lighter the crop the greater the percentage of codling moth injury. This generalization appears questionable in light of the results obtained with DDT on Starking in which the number of apples per tree was only approximately one-half the other varieties, the percentage of injury was nearly the same when 1 pound or more of DDT was used. The number of apples per tree, percentage of worms, stings and clean fruit for each variety in each test are shown in Table II.

TABLE II
A Comparison of Insecticide Treatments According to Size of Crops

Row No.	Material Used	Variety	No. Apples	% Worms	% Stings	% Clean Fruit
1&8	Lead in 7 sprays plus nicotine & oil in 2, 3, 6-7 covers.	Grimes	6,287	26.3	14.2	59.5
		Stayman	3,771	12.6	8.7	77.1
		Starking	2,305	34.8	16.0	49.2
2	3 lb. lead in 1st five sprays plus oil & nicotine in 2 & 3 covers. 1 lb. DDT in 6 & 7 covers.	Grimes	6,092	14.1	7.8	80.3
		Stayman	4,176	13.5	4.5	82.1
		Starking	1,700	28.2	11.4	60.4
3	3 lb. lead in petal fall, 1½ lbs. of DDT in other 6 sprays.	Grimes	4,282	12.8	4.3	82.9
		Stayman	2,415	14.4	1.8	83.8
		Starking	1,875	15.9	4.4	79.7
4	3 lb. lead in petal fall, 1 lb. DDT in other six sprays.	Grimes	5,138	18.6	4.7	76.7
		Stayman	4,774	28.2	3.5	68.3
		Starking	2,714	22.0	3.7	74.3
5	1 lb. DDT in petal fall (skipped first cover spray). 1 lb. DDT starting 2nd cover for 5 sprays.	Grimes	4,361	29.1	3.8	66.1
		Stayman	5,629	18.4	3.8	77.8
		Starking	2,704	30.7	6.9	62.4
6	3 lb. lead in petal fall. ½ lb. DDT in other 6 sprays.	Grimes	4,219	42.8	6.6	50.6
		Stayman	3,691	34.3	4.2	61.4
		Starking	1,753	52.8	5.3	41.9
7	3 lb. lead in petal fall. ¾ lb. DDT plus 1 lb. lead in other six sprays.	Grimes	4,901	18.8	4.9	76.3
		Stayman	3,996	23.1	4.5	72.4
		Starking	3,183	43.7	3.3	53.0

An analysis of the percentage of clean fruit of each variety shown in Table II indicates that when DDT was used at the rate of one pound or more per 100 gallons in six sprays the percentage of clean fruit remained approximately the same on all three varieties. In those rows where DDT was used at less than one pound in five sprays, or one pound in two sprays and in the check rows, the clean fruit on the Starking was much less than on either of the other varieties.

Discussion: When DDT was used at one pound or more in five sprays, codling moth injury was held to a minimum until after August 10. The other combinations varied in effectiveness in holding the first brood moths, with one-half pound DDT being the least effective. In all cases the greater part of the injury occurred after August 10. It appears reasonable that the infestation on all rows could have been greatly reduced by the addition of two applications of spray, one on August 10 and the last approximately August 25.

Any combinations in which DDT was used proved more effective in reducing stings than the standard spray, but failed to show the same efficiency in reducing worms.

No injury to the trees was observed from any of the combinations used. No injury was noticeable on the Grimes or Stayman at harvest, but the Starking showed a russetting that was believed to be heaviest on the row sprayed with 1½ pounds of DDT.

About the first of August, a severe infestation of European red mite developed on all the rows sprayed with DDT. The remainder of the orchard received four applications of oil and no red mite infestation developed.

Conclusion: From these tests it appears that DDT in all strengths and combinations used in these tests except the one-half pound dosage, gave as good as or better control of codling moth than the standard sprays used as checks.

The data in Table II indicates that where DDT is used at the strength of one pound or more per 100 gallons of spray the percentage of clean fruit will be approximately the same regardless of the size of the crop. This is not true in case of the standard schedules.

GROWER EXPERIENCES IN CONTROL OF CODLING MOTH

F. M. FREDERICKSON, Mt. Jackson, Virginia

I have found that lead arsenate alone is not satisfactory, and must be fortified with other materials. Thorough spraying is essential for results. We must try to cover every apple with spray. I find the use of an occasional top-off spray to be worth the effort, as we do not seem to get good coverage in the tree tops. Usually, 2 men on a tower, using single nozzle guns, and applying about 6 gallons per tree will give good results. After about the second or third cover, when apples have attained some size, we go under the trees and spray the inside at each spraying. By assigning certain spray crews to certain blocks, we find a rivalry between crews for best spray coverage and final control. The use of untreated, corrugated bands on the tree trunks in July and August helps reduce the late-brood worms. Remember, poor spraying, merely irritates the worms. We must spray to kill them.

HARVEY B. RAFFENSPERGER, Arendtsville, Pennsylvania

In the depression years, we tried to cut down on our spraying operations and a build-up of codling moth occurred. In 1933, we moved our lead arsenate up to 4 pounds per 100 gallons and killed a lot of worms but had heavy sting injury. Using the same program we had rather good results in 1934. In the following years, we tried various other materials with varying results. In 1942, we had good results using the following materials: First cover—1 pint nicotine, 1 quart soybean oil, and 5 pounds Wyoming bentonite in 100 gallons water. Second cover—nicotine and oil. Third cover—lead arsenate and a deposit builder (Orthex).

However, this did not repeat the good results in 1943, so in 1944, the trees were scraped, but the scrapings were not collected and burned. Bait pails were also used and we counted 6,000 moths in 10 bait pails. Then, we used 6 pounds of lead arsenate in first cover; 5 pounds in second cover; 4½ pounds in third and fourth covers; and 5 pounds in the fifth and sixth covers, using copper and lime as the fungicide in these sprays. With thorough application, the fruit showed less stings than when lead, oil and nicotine were used. Possibly the present materials are good, with results depending upon the weather. In 1945, we plan to use some materials developed by Mr. Steiner at Arendtsville Field Laboratory of the Experiment Station. In first cover flotation sulfur and 3 pounds of lead will be used. In second and third cover 2 pounds of phenothiazine (well-mixed), and 3 pounds of lead will be used, followed by lead and Bordeaux in later sprays.

SPRAY APPLICATION—HOW GET THOROUGH SPRAY COVERAGE ON APPLE AND PEACH TREES?

Grower Discussion led by DR. E. N. CORY

S. M. Fulton: To get thorough spray coverage on a tree I would name these points as essential: 1. Have sufficient equipment and by that I mean enough equipment to cover the orchard in at least 4 to 5 days. 2. Have good equipment. No matter what kind of sprayers used, they should be machines that will work efficiently. 3. Prune trees properly and sufficiently to be able to put spray materials into all parts of the tree. 4. Make special effort to spray the inside parts of the tree. It is not the gallons that are put on, but the thorough coverage of the tree that gives control.

D. E. Rinehart: Mr. Fulton has mentioned two points I had intended to make, these being proper pruning and sufficient equipment. I would also add that the equipment be powerful. We get good coverage by using a man on the tower and a man on the ground. We also try to spray with the wind, applying the spray from windward side of the tree.

S. B. Waddell: To get thorough coverage the spraying job must not be done in a hurry. Take time to really spray each tree. The spraying job is no place for use of poor equipment. I have seen the time when 3 or 4 sprays per season well-applied gave as good or even better results than many sprays half-done. There is little time to waste at spraying season, so it pays to plan ahead to have everything handy, so it will be ready to use when needed.

QUESTION BOX

Submitted by Growers

1. *What about the Speed Sprayers?*

W. C. Main: This is a satisfactory machine if handled by a good operator. The machine must be studied, the nozzles and flow properly

adjusted, and the job must not be rushed or poor coverage may result. We are getting more of these machines for our orchards.

2. *Is there a practical spray for killing poison ivy?*

D. T. Walker: Practically complete kill of ivy was had by applying a spray of DuPont's "Ammate" in June, using $\frac{3}{4}$ of a pound of Ammate per gallon of water. We used 1/64th inch disks at 650 pounds pressure. It is necessary only to wet the leaves until they drip. In a few years some of the ivy will come back, but it can be sprayed out.

3. *What is the best type spray nozzle?*

Edwin Gould: Every grower has his favorite kind of spray nozzle. In our experience of several years' work in applying experimental sprays at Kearneysville (W. Va.) Experiment Station Farm, we believe that we get best coverage with 8-nozzle brooms with No. 4 discs at 600 pounds pressure. Some growers like single nozzle guns, but unless the gun is properly used you are apt to miss a lot of coverage.

4. *Is the pink spray on peaches a necessity?*

E. A. Walker: One or two pink or pre-blossom sprays are essential on Eastern Shore of Maryland for control of blossom blight and twig blight. For Western Maryland a pre-blossom spray would benefit orchards where serious blossom blight has occurred in past seasons. Blossom blight leads to spur and twig blight and carries infection for fruit brown rot at harvest time. Wettable sulfur or a weak liquid lime-sulfur should be applied when blossom buds show pink, to have a fungicide present when brown rot spores begin to disperse just ahead of blossoming. Maryland studies have shown that brown rot spores begin spreading through the orchard about the time the blossoms begin to open and continue for about 10 to 15 days. These spores arise from spore cups developed around mummified peaches half-buried in the soil. Most mummies must be on the ground for two years or more before the spore cups develop, and the mummies may continue to develop spore cups for 5 to 7 seasons thereafter. Growers should examine their orchards just before blossoming and watch the development of these spore cups on mummified fruits to help in timing sprays for control. If spore cups are abundant and weather is wet and unusually warm, a sulfur dust or a mild sulfur spray may be applied full-bloom.

J. G. Harrison and F. W. Allen suggested raking up and destroying mummies or disking them under.

5. *What about basic lead arsenate versus acid lead arsenate on peaches?*

C. Graham: Basic lead arsenate will cause less possible injury to foliage, but is practically worthless for curculio control. Use acid lead arsenate and be safe.

6. *Which is better—Black Leaf 40 or Black Leaf 155?*

C. Graham: Both have their uses. On early sprays for codling moth control the Black Leaf 40 is used, and for second brood moth use Black Leaf 155.

POST WAR PLANS FOR FRUIT CROPS IN MARYLAND

STANLEY M. FULTON, Chairman Committee on Post-War Plans for Maryland Fruit Industry

Culturally.

1. Reduce waste during production by better control of insect and disease pests, through more efficient spraying and cultural methods.
2. Study carefully the best methods of soil management and maintenance of soil fertility.
3. Replace with the more approved varieties, the many obsolete varieties not in market demand.
4. Remove undesirable trees.
5. Establish a rotation system of planting.
6. Space trees in new plantings so that more efficient operations are possible.
7. A close study may show that greatly increased acreage of fruits isn't advisable.

Crop Estimates.

Growers must be impressed with the importance of making complete and accurate reports.

Closer Cooperation Between Growers of fruits, whether of the same kinds, or of allied and competitive fruits, is becoming more essential.

Marketing the Crop.

1. Building of better good-will or public relations between the grower, the dealer, and the consumer.
2. Growers must pack a better product.
3. The marketing operations must be simplified.
4. Vigorous action must be taken to assure and speed construction of adequate marketing facilities in Baltimore.
5. Fruit growers of Maryland should plan to take vigorous and active part in the future resumption of foreign trade.
6. Fruit growers of Maryland should become acquainted with the newer developments in preparation of fresh fruits for market in frozen

form. Also, they should keep abreast of the development of new by-products.

7. Growers must enter into the field of advertising or publicizing their products.

Research should be stressed along such lines as:

1. Consumption of fruits and consumer preferences.
2. Packaging of fruits.
3. Continued breeding and selection of better adapted fruit varieties.

Administration of Business Management.

1. Expand cautiously.
2. Borrow on credit only when necessary, and then only for short-term loans.
3. Improve land, buildings, and equipment.
4. Investigate the present and future supplies of used Army equipment, and purchase cautiously.
5. Enter vigorously into the promotion of the existing grower agencies for publicity and sales promotion.
6. Take renewed interest in existing organizations.

Labor Supply.

The grower should plan to select good men, train them, and assure them the security of a long-time job; good living quarters where necessary; attractive and reasonable wages; reasonable hours of work; a bonus or a share of profits where necessary.

Among the millions of war veterans who return there are bound to be men of ability who can do a good day's work and also assist the growers in the management of the many details connected with the production of the fruit crop.

Committee: Stanley M. Fulton, Chairman; Albert F. Vierheller, Secretary; Dwight T. Walker, D. Eldred Rinehart, John P. Caspar, Olin R. Higgins, Marshall T. Heaps, Amos E. Reeder.

SAFEGUARDING THE ORCHARD INVESTMENT IN THE POST-WAR PERIOD

S. H. DeVULT, Head, Department of Agricultural Economics, University of Maryland, College Park, Maryland

The economic position of the fruit grower is determined mainly by the general business situation—the level of consumer income, the general price level and the level of employment. The demand for fruit is elastic and the strength of this demand is predicated upon consumer income in this country and our exports of fruit abroad at prices other countries can pay and at prices at which we can afford to sell.

In appraising the economic position of the fruit grower in the post-war period, it is necessary that we first review the general outlook with respect to the national income, farm income, prices, employment, domestic demand, and foreign demand.

Comparison of the Two World War Periods

History often repeats itself, and we can learn much about the course of economic trends in the future by studying what has happened in the past under similar forces and circumstances. Many of us can remember the First World War with its high prices, inflated values, and increased debt obligations, and we can also remember the period just after the war when the slogan was "Two cars in every garage and two chickens in every pot." These were the halcyon days, and many people thought we were on a new high plane of living that would continue.

A comparison of the First and Second World Wars shows a striking similarity. Farm prices, wholesale prices, land values and costs of production in this war have followed a similar pattern to the years 1914 to 1920. Consumer incomes and Federal debts have increased much more during the present war than in the First World War period. Ceiling prices in the last two years have tended to hold farm, wholesale and retail prices down and there has been a leveling out of prices recently.

Farm prices continued to rise for about two years following the close of the First World War. Then they took a sudden drop about 1921, and another more serious decline in 1929. While prices of things bought by farmers declined some, they tended to remain at a much higher level. Thus, for a period of about 20 years from the fall of 1921 to the fall of 1941, farm commodity prices were very low compared with prices of things farmers had to buy.

Three Separate Phases of Post-War Period

There are expected to be three distinct phases of the post-war period. These might be called the transition or reconversion phase; the industrial prosperity period; and the question mark period.

The period of reconversion from wartime to peacetime economy, theoretically will start at the time peace is declared. Actually, it has already started and will continue for some time after the close of the war in the Pacific. This will be a difficult period, and its severity will depend upon the time intervening between the close of the war in Europe and the war in the Pacific. This period will be characterized by unemployment as war plants are closed for conversion to peacetime production. Reliable sources estimate a reduction of 10 percent in employment as soon as peace is declared in Europe, and this rate of unemployment will continue to increase for a period of from 6 months to a year. This

period will be characterized by a reduced national income, probably 20 percent, and lower farm prices and income. Probably the ratio of prices received by farmers to prices paid by farmers will decline, resulting in a less favorable purchasing power ratio.

The next phase of our economy will be the industrial boom period. Industry will have reconverted and will be producing huge volumes of durable and non-durable goods to satisfy the demands of consumers for things they have been denied during the war. With accumulated savings, the people are expected to make heavy purchases. There will be such a demand for goods and services that, unless controlled, it will result in the greatest buying boom in our history.

We will enter the third phase of postwar economy when the backlog of human wants for goods and services has been satisfied. This may be called the period of recovery or adjustment of peacetime spending to peacetime earnings. Will this be a period of depression or a period of normalcy? This may be the trying period for farmers, business, and industry. It may be comparable to the period of 1929 to 1939.

Farm Income and Prices

Farm prices will decline some in 1945. Already prices seem to have leveled out, and for some commodities were lower during the latter part of 1944 than for the corresponding period of 1943. The level of farm income in the short-time period will depend upon the level of employment and national income in this country and the demand abroad.

The national income in 1944 was 157 billions of dollars. During the first 6 months after victory in Europe, the income is expected to decline to 135.7 billions of dollars, or 14 percent. The postwar level of national income will be about 108 billions of dollars after the close of the war with Japan. This will represent a level of income 32 percent below that of 1944. By late 1946, as many as 8,000,000 persons may be unemployed.

Net farm income in 1944 is estimated at 12.6 billions of dollars. For the first 6 months after the close of the European War, it is expected to decline to 11.1 billions of dollars, a decline of about 1.5 billions of dollars below the 1944 level. Another 2.1 billion decline is expected after both wars end, a decrease to 9.0 billions of dollars, or 29 percent under the level of 1944.

The year 1947 is likely to be one of postwar recovery, with both national and farm income recovering from the temporary adjustment period. Industry will be speeding up after reconversion from wartime peacetime production.

The long-time outlook is for decreased foreign trade for agricultural products. The long-time outlook for domestic demand will depend upon

the level of employment and income. We cannot expect to have a good domestic demand for our farm products, high farm prices and incomes unless we have full employment in industry and a high national income.

Congress has passed the Steagall Amendment extending price floors for the basic and proclamation commodities for two calendar years after the war at not less than 90 percent of parity or comparable price. If prices are supported at 90 to 100 percent of parity, the tendency will be for farmers to over-expand production. The Government will have to buy at high prices and sell at low prices, and it is inconceivable that the Government can continue such deficit financing.

Probably neither price supports nor price ceilings should be removed entirely as soon as the war is over, but they should be tapered off. For the first year of the reconversion period, price supports might be at 80 percent of parity or comparable price; the second year, at 60 percent, etc. Price controls should be eliminated entirely as soon as conditions will warrant. The present policy of the Government to set prices on apples at so much per bushel, instead of on the basis of grade and quality, is a step backward in our grading work.

Some Things That Should Be Done to Strengthen the Economic Position of the Fruit Grower

1. Recapture and strengthen our export market.

It would be a tragedy for ourselves and the world if we should fail to develop our foreign trade. We need to develop bilateral and multilateral trade agreements; to eliminate trade barriers; and to develop a sound policy of two-way trade. We need this not only for the sake of a high standard of living among our own people but for the sake of world peace.

The fruit growers of the Cumberland-Shenandoah region should take an active and vigorous part in promoting the resumption of our foreign trade. Nationally, fruit growers should be in a position to export 15 or 20 percent of their production and take up any slack or surplus. To this end, they should promote the formation of a National Council, such as the U. S. Horticultural Council, which would represent the fresh fruit industry in matters relating to world trade and be instrumental in improving internal matters. We need a united front, some organization that would have authority and bargaining power in dealing with countries on problems relating to foreign trade.

2. Increase the consumption of deciduous fruits.

The per capita consumption of fresh citrus fruits averaged 48.8 pounds for the years 1935-39 and has increased each year since, reaching a total of 65.6 pounds in 1944. Per capita consumption figures vary considerably from year to year. The consumption of commercial apples

averaged 30.2 pounds per person for the year 1935-39 and the average civilian consumption per capita was 30.9 pounds in 1941; 26.8 pounds in 1942; 23.0 pounds in 1943, and 24.8 pounds in 1944. The armed forces are using, in addition, great amounts of apples and by-products, but this is emergency, not normal outlet.

There is no logical reason why the consumption of apples cannot be increased. This will require closer cooperation among the growers, better advertising, better cultural practices, better packing and packaging, and improved sales and merchandising methods.

Fruit growers of this region should become better acquainted with the newer developments in preparation of fresh fruits for market in frozen form. They should keep informed of the developments of new by-products such as dried fruits, canned fruits, juices, syrups, etc., as further outlets for fruit not suited for fresh market consumption.

3. Narrow the spread between the price producer receives and the price the consumer pays.

In spite of the fact that farmers in the United States have received a slightly higher percentage of the retail price for their commodities during the recent period of higher prices in general, our system of distribution is woefully inefficient. In September 1944, for 50 agricultural commodities, the farmer received only 52 percent of the retail sales price, and on many of these commodities he received less than 35 percent. The farmers' share of the retail price on apples was 39 percent. Consumers pay about two and one-half times the price that producers receive for fresh fruits. It is interesting to note that the farmer received in September 1944, 87 percent of the retail price on beef, 74 percent on pork, 84 percent on butter, 67 percent on cheese, 58 percent on milk, 71 percent on eggs and 65 percent of the retail price of chickens, in spite of the fact that most of these products are highly processed. It is only fair to mention, however, that subsidies in some form or other are granted by the Government on some of these commodities.

Fruit growers should be concerned with the distribution of fruit and should give careful consideration to means of lowering the cost. More attention should be given to shortening the channels of distribution and carrying the products nearer to the consumer.

With the return of unrestricted automobile travel, city consumers will make longer trips to purchase fresh produce. Fruit growers should develop this potential outlet and sell more of their production directly to consumers, thereby obtaining a greater share of the price paid by consumers. Proper storage facilities will make it possible for growers to merchandise their fruit over a longer period and thus sell a larger part of their production direct to consumers or through nearby retail outlets.

Growers must give more attention to packing a better product and to new and improved types of packages. The product must be attractive to the eye as well as the palate. The package should be neat and attractive and convenient for use in the trade. Above all, there is need for improving the grade and quality of the product, for more careful packing, and for more attractive packaging.

4. Improve market facilities.

Because of the complex production and marketing structure that has been developed through the years, the distribution of perishable foods, particularly fruits and vegetables, involves more problems than are encountered with any other category of farm products. Inefficient practices, improper organization, and unsuitable facilities, have contributed heavily to the high costs of distributing these commodities. The cost of transporting, wholesaling, jobbing, and retailing these foods through inefficient and obsolete facilities must be reduced.

Our wholesale fruit and vegetable markets are antiquated and wholly inadequate to handle efficiently the produce that arrives in our terminal markets by modern means of transportation. The markets are not coordinated; they are congested; the facilities are poor; and most of the markets are not equipped to handle truck receipts.

A study made of the Baltimore wholesale fruit and vegetable markets indicates that excessive handling and delivery costs for fruit and vegetables alone in this market amount to \$1,000,000 annually. The saving that could be effected through a reduction in the cost of distribution by having a modern consolidated wholesale produce market in Baltimore would pay for the market improvements in 4 years. Similar studies made in New York, Philadelphia, and other markets indicate that tremendous reductions in the present high costs of distribution could be effected through modern terminal market improvements.

Plans are now being made to rebuild and improve these terminal market facilities in the post-war period. Governor O'Connor's Market Commission is developing plans for improving the market facilities in Baltimore. The fruit growers of this region should vigorously promote the furthering of this worthwhile project.

5. Do not over-expand.

Already there is some indication of an over-expansion in fruit production, and the peach crop particularly may be facing a period of over-production. Ways of increasing consumption would help in warding off danger of over-production. Better organization, publicity, packaging, storage and more attention to the preparation of fresh fruits for market in frozen form, would be helpful in overcoming the temporary periods of over-production.

High prices for fruits tend to stimulate increased plantings. Fruit growers, as a whole, give too little thought to the bad results of alter-

nating periods of heavy and light planting of trees. Good rotation plantings on fruit farms produce many desirable results, such as greater economic stability within the industry, more even distribution of income, better preservation of the soil resources, reduction in disease and insect damages, and a better opportunity to take advantage of improved varieties and orchard practice. Dairymen systematically replace their herds year after year and by such process they are able to improve their production and marketing. Likewise, fruit growers can make periodic plantings on a rotation basis with beneficial results.

Land prices in Maryland have risen 42 percent since the beginning of the war and are increasing at the rate of $1\frac{1}{2}$ percent per month. Many growers in Maryland are still handicapped by high-priced land purchased after the last war. It would not be wise to expand production by acquiring additional land at greatly inflated prices, in view of the long-time economic outlook. Rather than buy additional land to plant more trees, growers should build up sufficient reserves to tide them over the bad years. Reserves should be sufficient to pay all expenses of one year's operations, and preferably for two years. For example, an orchardist with operating expenses of \$5,000 should have a reserve of \$5,000 to \$10,000. The less diversified a fruit grower is, the more reserve he should have to carry him over a longer period. It is not economy to spend needlessly from current income in order to reduce income tax payments. A dollar of income on which you pay 30 cents in tax, leaving you 70c for a reserve, is a better alternative than spending that dollar for something not really needed in your business.

Growers should improve their land, buildings and equipment for greater efficiency and to meet the increasing competition in fruit growing.

Debts should be curtailed as rapidly as possible and any surplus of income should be carefully and wisely invested in as liquid form as possible.

Farm record keeping plays an important part in safeguarding investments in orchards. Such records need not be in great detail, but they should serve two major purposes: (1) To supply information which will help to determine unprofitable practices; and (2) to serve as a basis for income tax reporting.

Fluctuating income is a characteristic of the fruit growing business. Orchardmen should be on guard against the adverse results which attend wide fluctuations in income, especially with reference to income tax liabilities. Thus, it is important that a fruit grower choose that form of record keeping which will give greater regularity of taxable income and thereby cause him to pay no more than his just share of tax.

6. Be alert to take advantage of new and proved developments in science.

Materials and equipment should be available to can and freeze an increasing proportion of the fruit crops. If this can be done at a lower cost per unit of product, new market outlets as well as old ones should be reached throughout the year.

In the post-war period, air transport of farm products is likely to develop to the point where such service is economically possible and feasible. There was a limited pre-war air traffic in agricultural commodities, as trial shipments, of such products as costly flowers and baby chicks. These products traveled as part of general express cargoes in passenger planes. Similar shipments will grow in the future and there will be complete plane loads of cargo at much lower rates. The airplane builders and airlines are talking of air freight rates as low as 10 cents a ton mile.

Studies made at Fort Wayne, Indiana, indicate that at 15 cents a ton mile strawberries and tomatoes will move by air, and that at 10 cents, peaches, apples, beans and some other products would be added to the list.

Advantages to growers would be enhanced appearance, less spoilage, extended marketing areas, and a better selection of favorable markets. Perhaps the most interesting opportunity to the grower will lie in the development of fruit and vegetable varieties to be shipped ripe, instead of partially ripened as now. Prices might be higher, which would partially offset the increased cost. Freezable fruits could be frozen and shipped most anywhere in a short period of time.

Getting the produce to airports large enough for big cargo planes offers a challenge. Gliders might help to solve this problem. Huge airports in agricultural regions would not be needed, if gliders could be snatched aloft from smaller fields.

We don't have to speculate about extension of air service to rural America. It may be 5, 10 or 15 years coming about. It will come as soon as planes can be had and cost of the service is reduced to the point where it is economical to use this type of transport.

REPORTS OF COMMITTEES

The *Nominating Committee* recommended the re-election of all present officers:

President—Dwight T. Walker, Mt. Airy.

1st Vice-President—Lloyd Balderston, Colora.

2nd Vice-President—Marshall T. Heaps, Cardiff.

Secretary-Treasurer—Albert F. Vierheller, College Park.

Executive Committee—A. Lee Schrader, College Park; Stanley M. Fulton, Hancock; William C. Main, Hagerstown; D. Eldred Rinehart, Smithsburg; E. C. McFadden, Hagerstown; Sherman B. Waddell, New

Windsor; Russell C. Shaw, Stewartstown (Pa.); J. A. Cohill, Hancock; G. Rust Canby, Silver Spring; John P. Caspar, Hancock; W. T. Delaplaine, Frederick.

Director to State Farm Bureau—Marshall T. Heaps, Cardiff.

Delegates to State Farm Bureau—E. D. McCain, Frederick; D. E. Rinehart, Smithsburg.

Directors to Appalachian Apple Service—E. D. McCain, Frederick; W. T. Delaplaine, Frederick; G. W. Gardenhour, Smithsburg; Lloyd Balderston, Colora; S. M. Fulton, Hancock.

Committee report was adopted unanimously.

The Auditing Committee reported the Treasurer's books and records to be in good condition.

RESOLUTIONS

The Resolutions Committee offered the following resolutions which were adopted after some discussion in a few cases, regarding certain clarifying changes in wording:

WHEREAS, This Society realizes the great importance of a solid unity among the food producers at this critical time of world conflict, be it

RESOLVED, That as loyal Americans, the fruit growers will abide by any reasonable decrees or regulations issued or established by War Production Board, War Food Administration, Office of Price Administration, or any other agencies having authority over the necessary supplies, on final products involved in our industry, consistent with the preservation of the fruit crop between the points of production and consumption, and the orderly marketing of this fruit.

WHEREAS, The problem of obtaining sufficient farm labor for proper cultivation and harvesting of farm crops presented a very serious threat to the production of farm products so essential to the war effort, and

WHEREAS, This farm labor problem has been skilfully handled by the individuals and agencies appointed to administer the many details, in spite of the many difficulties that have arisen from time to time, be it

RESOLVED, That the Maryland State Horticultural Society, assembled at its Forty-Seventh Annual Meeting, again expresses its appreciation to the Director, County Agricultural Agents, and Specialists of the Extension Service, University of Maryland, and especially to Mr. Paul E. Nystrom, and extends its thanks for the very fine work during the past year, in furnishing sufficient farm labor during the past season which resulted in the maintenance and harvesting of farm crops.

WHEREAS, We realize the great inconvenience suffered by our speakers in traveling from their headquarters to our meeting, and

WHEREAS, These speakers have brought to us the profitable benefits of their research and experience, making our meetings of great instructional value,

BE IT RESOLVED, That this Society extend its deep gratitude and thanks to these speakers for their valuable services to our industry.

WHEREAS, Our accommodations during the progress of our meetings have been excellent, in spite of the many handicaps which we know must exist,

BE IT RESOLVED, That this Society express its gratitude to the Management and staff of Hotel Alexander for the many favors extended, which have added to our comfort and convenience, and for furnishing such a well-equipped meeting room, and the many other facilities.

WHEREAS, The several national organizations representing the interests of the fruit and vegetable organizations have continued to render many invaluable services to the growers of these commodities in the year just passed, be it

RESOLVED, That this Society again express its gratitude and appreciation on behalf of the fruit growers of Maryland, to the Secretaries of Appalachian Apple Service, National Peach Council, National Apple Institute, International Apple Association, and Cooperative Fruit and Vegetable Association for their continued vigorous efficient work during the past year.

WHEREAS, There is urgent need for a united front among the producers of the various types of fruit crops in the United States to consider the many post-war problems and to solve these problems on a nationally equitable basis, and

WHEREAS, This Society adopted a resolution at its previous Annual Meeting urging the National Apple Institute to join with the other national fruit growers' organizations in forming a National Fruit Advisory Council, and

WHEREAS, A meeting of such organizations has been called for the formation of such a Council, and there is little doubt that such a Council will be formed, be it

RESOLVED, That this Society extend its gratitude to The National Apple Institute for its efforts in bringing about the formation of this Council.

WHEREAS, Horticulturists are ready to cooperate to the fullest extent in the production of food necessary to the national war effort, and

WHEREAS, The critical shortage of farm labor which threatens to become more acute in 1945, is the greatest deterring factor,

BE IT RESOLVED, That all agencies that have contributed toward ameliorating the farm labor problems, including the Extension Service, War Food Administration, the Selective Service Boards, and the Service Commands of the United States Army, be commended for their splendid assistance in 1944, and be urged to redouble their efforts in 1945.

BE IT ALSO RESOLVED, That the State and County Selective Service Boards be requested to be especially judicious in the administration of Selective Service regulations, so that essential farm workers for whom no replacements are available, may be retained as key men and as foremen for inexperienced farm laborers and harvest workers.

BE IT ALSO RESOLVED, That Senator Millard E. Tydings be commended for his foresight in sponsoring the Tydings Amendment and that he be urged to safeguard its provisions in connection with recent manpower directives designed to increase induction of farm laborers into the armed forces, and also in connection with proposed legislation for a draft of men in 4-F classification.

BE IT ALSO RESOLVED, That necessary orchard practices, such as pruning, spraying and thinning of fruits be given a high priority in the use of prisoners of war.

BE IT ALSO RESOLVED, That the War Department be urged to establish more prisoners of war camps in areas of critical farm labor shortage, and to finance the construction of such camps.

BE IT ALSO RESOLVED, That the Extension Service and the War Food Administration be urged to import into the State of Maryland, the maximum number of foreign workers needed for proper harvesting of farm crops.

WHEREAS, The Maryland State Horticultural Society recognizes that an emergency exists in the fruit industry by virtue of the codling moth menace, be it

RESOLVED, That this Society requests that a horticultural field laboratory, with proper facilities, be established in Western Maryland to handle the problems of the fruit industry. This would include the services of well-trained men, including one entomologist, one horticulturist, and one trained pathologist, with sufficient funds allotted for travel and supplies with which to solve field problems. Suitable laboratory space

should be rented to include facilities for inspection and spray residue analysis. We request that a minimum of \$15,000 be appropriated for these services.

After discussion of the last resolution regarding an appropriation for establishment of a field laboratory for horticulture, entomology and pathology, President Walker appointed a committee to confer with President H. C. Byrd and Dr. T. B. Symons of the University of Maryland to request the inclusion of this item in the University budget or to advise concerning the matter.

THE STATE HORTICULTURAL COUNCIL

Dr. C. H. Mahoney, Head, Horticultural Department, University of Maryland, announced the annual meeting of the Council in Baltimore on January 10. He stated that the Council was a joint organization of the horticultural interests of the State, such as florists, vegetable growers, fruit growers and nurserymen. At these meetings the problems of the various interests are discussed, and any necessary united action regarding appropriations, etc., may be taken. He suggested that the resolution regarding field laboratory appropriation be presented to the Council, and if approved, it would then be passed on to the Farm Bureau for their approval and support.

The Baltimore market facilities were discussed, and since a resolution regarding the erection of improved facilities had been passed at the previous Annual Meeting no resolution was presented. It was stated during the discussion that the Governor's Committee had reported favorably and there was a probability that the new facilities would be considered after the war.

GROWER EXPERIENCES IN BUILDING ORCHARD SOILS

E. C. McFadden: In the shale soils of the Hancock section the annual cover crop-cultivation system resulted in too much cultivation for that type of soil. In 1934, we summer-disked and in early fall rye was sown with 100 pounds nitrate of soda and 200 pounds superphosphate per acre. The following February sweet clover was seeded and in the spring the rye was mowed, the clover being allowed to remain for two years. This was disked down thoroughly and an early fall cover was sown, composed of one bushel rye, 25 pounds orchard grass, 15 pounds timothy, 10 pounds bluegrass, 20 pounds alfalfa, 20 pounds hairy vetch and 10 pounds alsike clover. Twenty pounds of this mixture was applied per acre with 100 to 200 pounds of nitrate of soda and 200 pounds superphosphate. Lime was applied where found necessary. The rye was mowed in full head and raked around the trees as mulch. The permanent sod came on, making excellent growth. It is mowed during the summer, and each year a top-dressing of nitrate of soda and superphosphate is applied.

D. E. Rinehart: Peach trees were planted on a 35 acre plot in fall of 1937. In spring of 1938 the ground was plowed and one ton of ground burned lime and 600 pounds of 5-10-5 per acre were applied. String beans and lima beans were grown as an inter-crop. In September one bushel of rye and 10 pounds of vetch were sown per acre. In spring of 1939 an early top-dressing of manure was given, and the cover was turned under when the rye was shooting heads. Then, 600 pounds of 4-8-7 were applied and the land was again inter-cropped with lima beans and string beans. After bean harvest the ground was disced and sown in fall to rye and vetch with a winter top-dressing of manure. In May 1940 the cover was disced down, followed by several summer discings, and in fall a cover of rye and vetch was sown and winter top-dressed with manure. This cover was disced down the following spring and the same summer-discing was followed as in the previous year. We had some tarnished plant bug injury on the peaches in 1941, so that fall we tried some plot combinations of rye and vetch; clover and vetch; and rye grass, all top-dressed with manure. These different plots were disced the following spring and we found that where we had vetch, we had serious plant bug injury on fruit and practically no such injury in the rye grass plot. Last fall I sowed one bushel of rye and 10 pounds of rye grass with 300 pounds of 3-12-6 fertilizer per acre and will be able to tell you later how this works out. I might add that each year the trees have had $\frac{1}{2}$ pound of nitrate of soda per year of tree age and we have had full crops from these trees each year except in 1943, when some low spots partly froze out.

Fulton W. Allen: On the lower Eastern Shore our soils are very sandy. We couldn't get good growth of legumes, so have relied upon tree applications of nitrate of soda for our nitrogen and winter cover crops of rye for organic matter. Sometimes we use thickly-sown corn for our summer cover. Usually we apply 300 to 400 pounds of superphosphate before sowing the rye cover crop. Over a ten-year period we have corrected our soil acidity. There are many broiler poultry houses in our section and we are now using about 5 tons of poultry house litter per acre, applying it about every 2 or 3 years. In an attempt to apply our fertilizer over the entire soil surface, in older blocks, we are trying a new attachment that throws the material over a wide area.

Here, a discussion arose regarding the machine attachment, some growers present having found it practical and efficient. There was also a discussion of the new plan being developed by certain fertilizer dealers where lime may be delivered and spread on the land at a certain delivered price.

W. C. Main: We have orchards located on several soil types, so our general system of soil improvement has been, first to take soil samples.

This is done by dividing the blocks into sections and taking at least four samples from each section. From the soil analysis, we plan the fertilizer and lime treatment. I think too often many of us, not having soil analysis, use lime when we should be using more phosphate or other materials. Cover crops are very important and some type of cover should be used that will give plenty of green mulch when mowed at least twice a season. The cover should be able to stand a light discing in the spring. We have found that we can increase our cover crop very much if we apply boron at the rate of 30 to 40 pounds per acre on the mulch centers. Boron is something we haven't heard enough about in the past, but I think it will be used on most crops in the near future.

S. M. Fulton: In our shale soils in the Hancock section we have a deficiency of organic matter in the soil and the soils do not hold sufficient moisture for tree needs. I would repeat what has been said about the use of cover crops for green manure. It doesn't matter what cover crop is used, as long as it is so adapted to soil conditions that it will give heavy tonnage of green material. We have about all our acreage in orchard grass and apply nitrate of soda, superphosphate and any necessary materials to make the crop grow. We mow it 2 or 3 times a year and disc it up every 2 or 3 years.

SOLVING SOME PROBLEMS CONFRONTING PEACH GROWERS IN 1944 AND 1945

Grower Discussion

R. C. Shaw: Bacterial spot on some peach varieties, especially Golden East, is one of our problems. It seems that some of the varieties of New Jersey origin are more susceptible to this disease. We had a problem of low supplies of peaches at times during the season, but I have planted a succession of varieties that will assure a constant supply of peaches during the season. Also, I found that we had too many blocks of old apple trees that added to growing costs and also would go out at about the same time. So, we have made it a rule to remove and replant blocks of old trees about every 4 or 5 years. We have no trees at present over 20 years old, and have a rotation system of planting well established.

H. F. Hershey: In my orchards located in Pennsylvania, I am working out the problem of lengthening the peach season. I have found some of the varieties of New Jersey origin to be of good quality. We must also plan to keep our trees in vigorous producing shape by pruning and fertilizing properly. Among my main problems, I would list 1. Curculio; 2. Brown-rot; 3. Labor to harvest the crop. Each grower must solve his problems in his own way. I once heard an economist give a long talk on costs and profits, and he ended by telling us to "go

out and get all you can and add 10 percent." If we will add 10 percent to our management and labor, we will solve a lot of our problems.

J. G. Harrison: In our orchards on lower Eastern Shore, we have all the problems discussed and then some more. We were so short of labor last season that we used boys to pick the crop and had women driving the orchard pick-up trucks. Our basket supply was about 90 percent short, and we used thousands of used baskets. This was a terrible experience, as there were all sorts of stamps on the baskets, also all sorts of lids, and many loose bottoms that came out. Try to get as many new baskets as possible, for used baskets really bring their problems. We had good weather during the peach season, and worked out a system of harvesting more peaches with less men. I don't know how we'll solve the railroad car shortage. Probably we will move more fruit by truck, if this can be done. Our troubles were increased by a shortage of ice for cars last season, due to the increased movements of poultry for military purposes. Our labor shortage is being relieved somewhat by use of German prisoners of war labor. They are now pruning in our orchards and are doing a fairly good job. I believe the peach grower must be in a "shifty" position, and ready to change or even reverse his orchard operations, if he is to produce and market his crop.

COSTS OF PRODUCING APPLES AND PEACHES IN MARYLAND AND THEIR RELATION TO PRICES AND PRODUCTION PRACTICES*

A. LEE SCHRADER, Pomologist, University of Maryland, College Park, Md.

This discussion was not designed as a detailed presentation of the cost items concerned in the growing of apples and peaches in Maryland, but rather as an analysis of the costs in relation to production practices now in use. The relatively low production of some orchards as a result of spring frosts made it possible to study costs at low production levels, usually not found except with poor orchards. Only well-cared for orchards were considered in this study. Under the spring-frost conditions in 1943, the peach yields ranged from zero to 160 bushels per acre and apple yields ranged from 25 to 220 bushels per acre. Data were obtained from 31 apple growers representing 4,100 acres with a production of 440,000 bushels in 1943, or about one-fourth of the average crop in Maryland. Thirteen peach growers with a total of 554 acres and a crop of 61,000 bushels furnished cost data for this crop for 1943. In all cases the growers were able to give actual total costs for growing, packing, and storing the 1943 crop, although the breakdown into cost items could not be given exactly in many instances.

*In the survey of orchardists in 1943 the assistance of A. F. Vierheller, Extension Specialist in Pomology is gratefully acknowledged. Also, the cooperation of the many orchardists of Maryland who furnished data in the survey is acknowledged with appreciation and thanks.

Apples

The apple production per acre for growers in this survey averaged 107 bushels, which was estimated by the growers as an average of 41 percent of crop ranging from 10 percent to 75 percent. The average cost per bushel based on the total number of bushels produced is given in Table I as \$2.01 per bushel, not including any interest charge for the investment in the orchard trees and equipment. This interest charge might be considered in two ways, either on the basis of cash invested in the trees to full producing age (12 years) less depreciation for any years of production, or as amount of money necessary to replace the orchard under present costs. Roughly speaking, such an interest charge might run from 10 to 20 cents per bushel. As a basis for determining price ceilings, the average cost of \$2.01 is misleading, since the production costs *per grower* should be considered, which, in this case, would be \$2.37 per bushel not including interest on investment in trees and equipment. The increase from \$2.01 on tonnage basis to \$2.37 on the grower basis, is due to the much higher general costs, growing costs, and depreciation costs for growers with less than 50 bushels per acre.

TABLE I

Apple production costs in Maryland for 1943 from 31 growers averaging 41% of a crop. The breakdown of costs fitted the grower's method of cost recording. Many growing and other costs in the first group are not exact and should include some of the general costs. However, the total costs involved are based on actual costs.

Explanatory	Cost Items Grouped	Cost Per Bushel	Cost Per Acre
Labor and materials, except repairs, gas oil and fuel	Growing	\$0.666	\$71.13
	Picking	0.165	17.60
	Packing	0.428	29.64
	Inspection	0.010	1.94
	Storage	0.179	7.66
Supervision; repairs; gas and oil; electricity; fuels; taxes; licenses; insurance; tenant house rental charge; telephone; telegraph; unclassified	General	0.288	30.78
4% of real estate	Interest	0.077	8.24
3% of operating capital			
10% on equipment	Depreciation	0.200	21.38
5% on buildings			
\$16.00 per acre of bearing trees			
Total costs*		\$2.013**	\$188.37

*Add pro-rated loss on off-grade fruit and interest on investment in trees and machinery.

**This average is based on total number of bushels. When average for each grower is computed, the average grower cost becomes \$2.37 per bushel.

Also, as noted in Table I, the amount of loss sustained per bushel on off-grade fruit should be added to the cost of producing the packed

fruit, pro-rating the loss by dividing the number of bushels of packed fruit into the total loss sustained on the off-grade fruit. The effect of such loss on cost per bushel is illustrated in Figure 1, where costs have been charted for varying percentages of No. 1 apples packed out. Losses on fruit of lower than U. S. 1 grade have been based on an assumed average price of 70c per bushel received for such lower grade and cull fruits. Thus, with a yield of 200 bushels per acre, if 50% of these fruits are U. S. 1, the cost per bushel would be \$2.73; if 60%, the cost is \$2.45; if 70%, the cost is \$2.22; if 80%, the cost is \$1.96; and if 100% U. S. 1 is produced the cost would be reduced to \$1.83. In analyzing the costs and yield shown in Figure 1, it is apparent that to break even with the January, 1945, prices, an 80 percent pack of U. S. 1 would require average acre yield of 135 bushels per acre; a 70 percent pack would require a yield of 185 bushels; a 60 percent pack would require a yield of 275 bushels per acre; and a 50 percent pack would require a yield of 500 bushels per acre.

The curves shown in Figure 1 are based upon the curve shown in Figure 2, in which the individual grower costs per bushel are charted, adding 20 cents per bushel to the per bushel cost found in 1943 to cover interest on orchard investment, etc., under present conditions. The part of the curve above the average of \$2.21 has been drawn free-hand to fit the data, and the part of the curve below the average has been calculated by assuming increased growing costs of \$105.00 for thinning, propping, extra spray, and interest on operating capital for yields of 600 bushels per acre and pro-rating this cost proportionately for yields between 100 and 600 bushels per acre. Since some acre costs decrease and others increase or remain stationary, a curvilinear relationship is found.

In Figure 2, two important practical notations can be made,—first, that a great decrease of 36c in cost per bushel results when yield increases from 100 to 200 bushels per acre, in contrast to only 13c decrease from 200 to 300 bushels per acre; secondly, practically, all of the growers that had yields of less than 100 bushels per acre had costs of more than \$2.50 per bushel, and below 50 bushels per acre the costs were \$3.20 and up. In the light of such figures, it behooves the grower to do everything to build up yields per acre to at least 200 bushels per acre and to get costs of production per bushel down to a level where margins of profit are possible in times of low prices. Increase in yields above 200 bushels are important in terms of some further decreased cost per bushel as well as greater returns per acre.

Considering Table I in more detail, it should be noted that depreciation of the trees, equipment and buildings can be a considerable item of \$21.00 per acre, which might be missed by the grower in calculating profits. Savings in cost per bushel seem most apt to lie in the more efficient use of labor in the growing, packing and picking operations, whereas in normal times the labor rate has been much lower and these items do not build up to such a great proportion of the total cost.

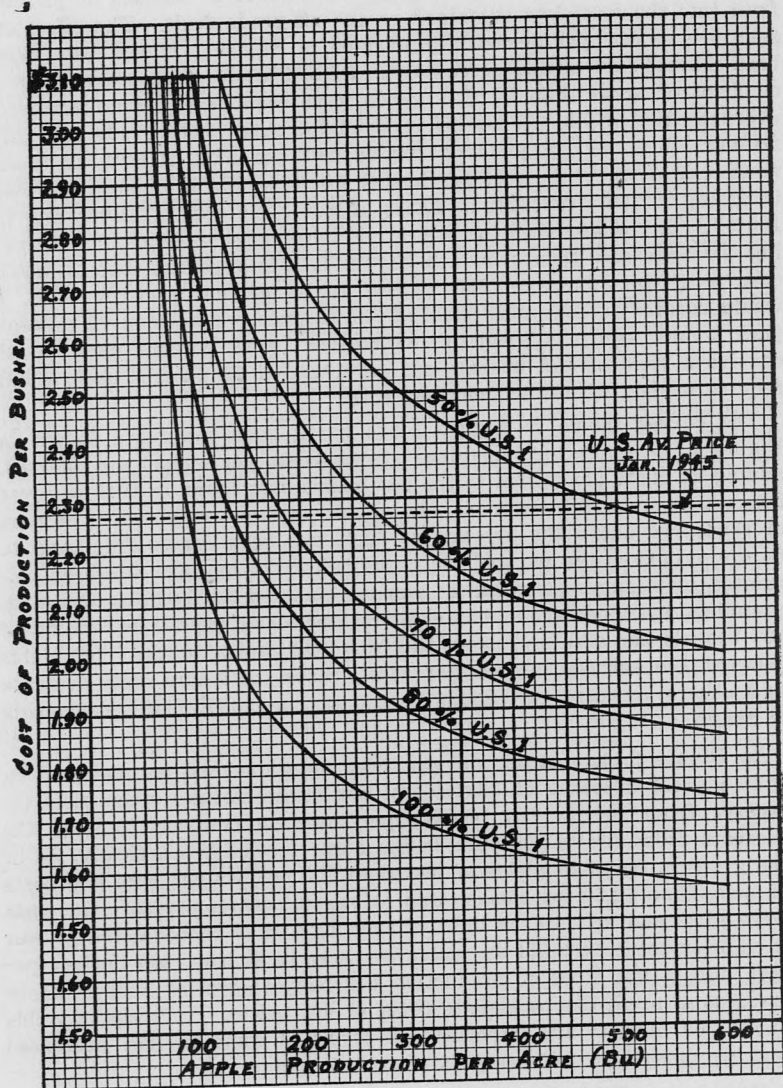


FIGURE 1—Approximate curves showing relationship between cost of production and yield for apples in Maryland and how this relationship is affected by varying percentages of U. S. No. 1 fruit, assuming that all off-grade fruit on the average is sold at a loss. The U. S. average price January, 1945, is the estimated average for the 1944 season, as released by the Bureau of Agricultural Economics, U. S. Dept. of Agriculture. All curves in this figure have been calculated from certain assumed costs and losses, using actual cost figures of 1943 as a base for starting the curve.

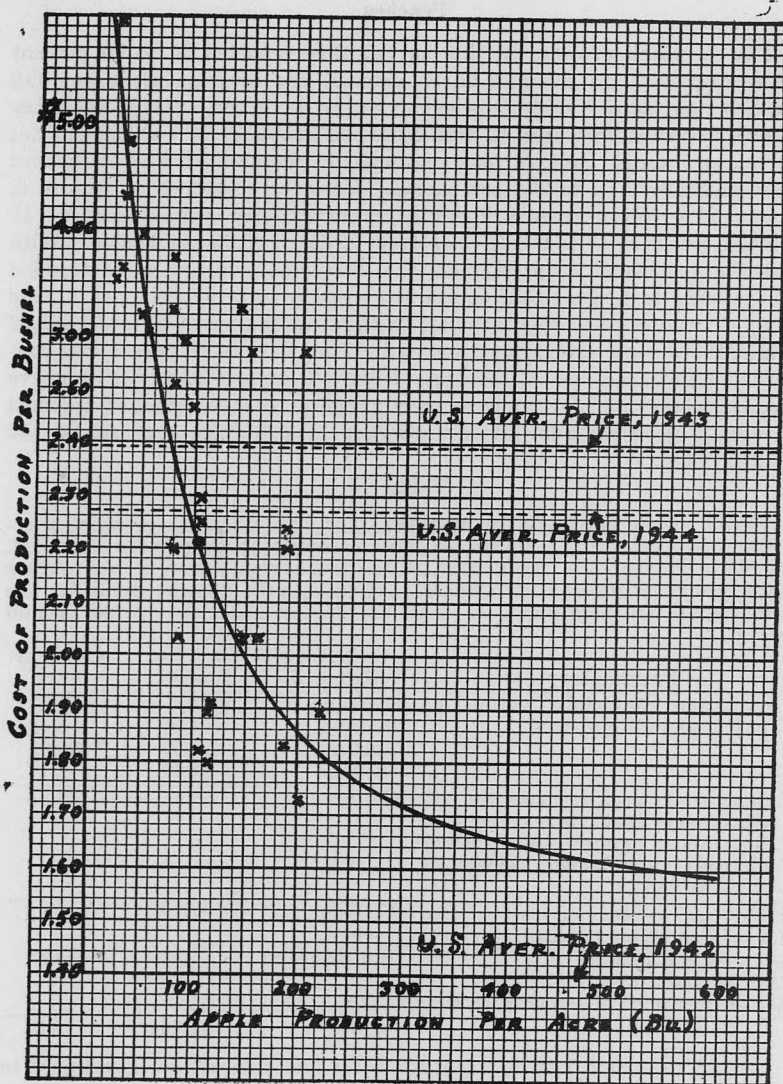


FIGURE 2—Apple cost of production in 1943 shown graphically for each individual grower (x mark) in the survey of 31 growers. Approximate curve to show curvilinear relationship between yields and costs per bushel has been calculated from assumed additional costs for the higher yields per acre above 100 bushels (see text) and by free-hand fitting for the lower yields. U. S. average prices for 1942, 1943 and 1944 are figures released by the Bureau of Agricultural Economics, U. S. Dept. of Agriculture.

Peaches

For 11 peach growers in this survey that reported 30 to 80 percent of a crop with an average of 70 percent, the average yield was 110 bushels per acre. With this group of growers the average cost per bushel reported in Table II was quite moderate, \$1.76 per bushel, not including interest charges for investment in the orchard and equipment that might add up to 20c per bushel. However, as shown in Figure 3, where 13 growers' costs are plotted, growers with a short crop of 50 bushels per acre or less had costs from \$2.16 to \$5.00 per bushel. With the short national crop of 1943, the Maryland average price enabled all growers to find a profit except the grower with only 10% of a crop and, of course, all other growers with a similar crop or no crop, of which there were several not reported. The curve of Figure 3 was constructed as in the case of the apple Figure 2, by free hand fitting above the \$1.96 mark and for the lower part of the curve, pro-rating of assumed increased growing and interest charges of \$101 per acre for a 600 bushel yield.

TABLE II

Peach production costs in Maryland for 1943 from 11 growers averaging 70% of a crop. Growers with little or no crop were excluded. As with apples, the breakdown of the costs was made in accordance with grower's method of keeping accounts, and certain items in the first group are not exact, as some of the costs appear in the second group.

Explanatory	Cost Items Grouped	Cost Per Bushel	Cost Per Acre
Labor and materials, except repairs, gas oil and fuel	Growing	\$0.523	\$57.95
	Picking	0.166	18.43
	Packing	0.359	39.82
	Storage	0.020	2.17
Supervision; repairs; gas and oil; electricity; fuels; taxes; licenses; insurance; tenant house rental charge; telephone; telegraph; unclassified	General	0.391	43.35
4% of real estate	Interest	0.072	7.93
3% of operating capital	Depreciation	0.233	25.89
10% on equipment			
5% on buildings			
\$16.00 per acre of bearing trees			
Total costs*		\$1,764**	\$195.54

*Add pro-rated loss on off-grade fruit and interest on investment in trees and machinery.

**This average is based on total number of bushels. When average for each grower is computed, the average grower cost becomes \$1.94 per bushel.

Again, as with apples, when the costs are averaged for growers, based on each grower average, the cost per bushel rises considerably to \$1.94 for the 11 growers in contrast to \$1.76 on the tonnage basis. To be fair to all growers, we would have to use \$1.94 plus interest charges on

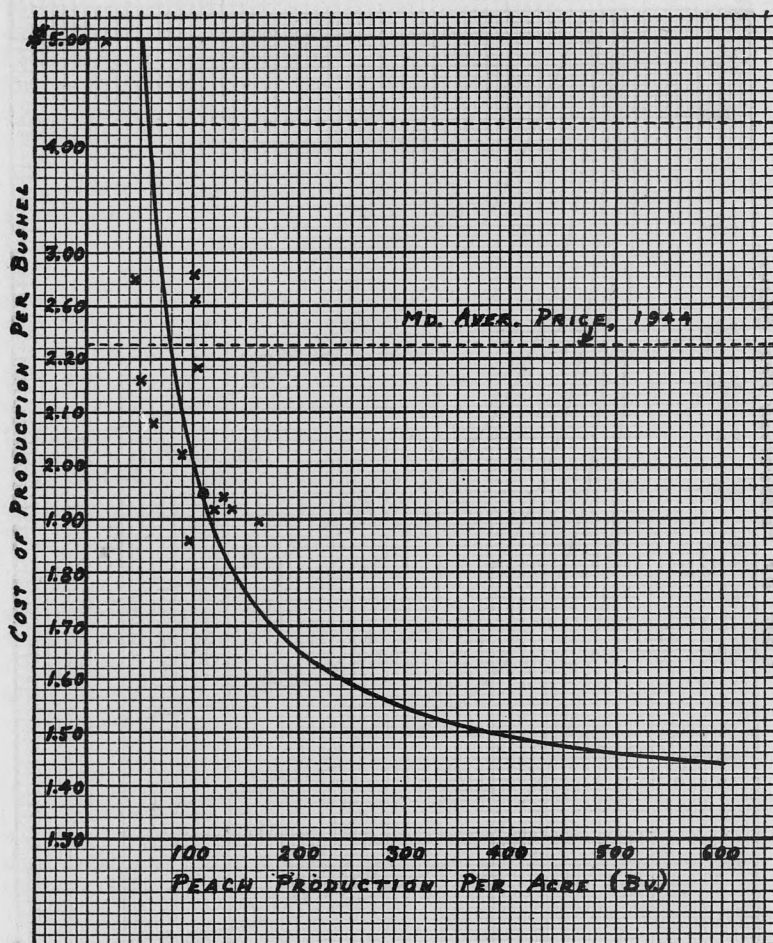


FIGURE 3—Peach costs of production in 1943 shown graphically for each individual grower (x mark) in a survey of 13 growers who had at least 10% of a crop in this season when spring frosts reduced the crop or eliminated the crop for growers of Maryland. An approximate curve to show the relationship between yield per acre and cost per bushel has been fitted to the data by calculation of assumed costs for yields above 100 bushels and free-hand fitting for lower yields. U. S. average prices are figures released by the Bureau of Agricultural Economics, U. S. Dept. of Agriculture.

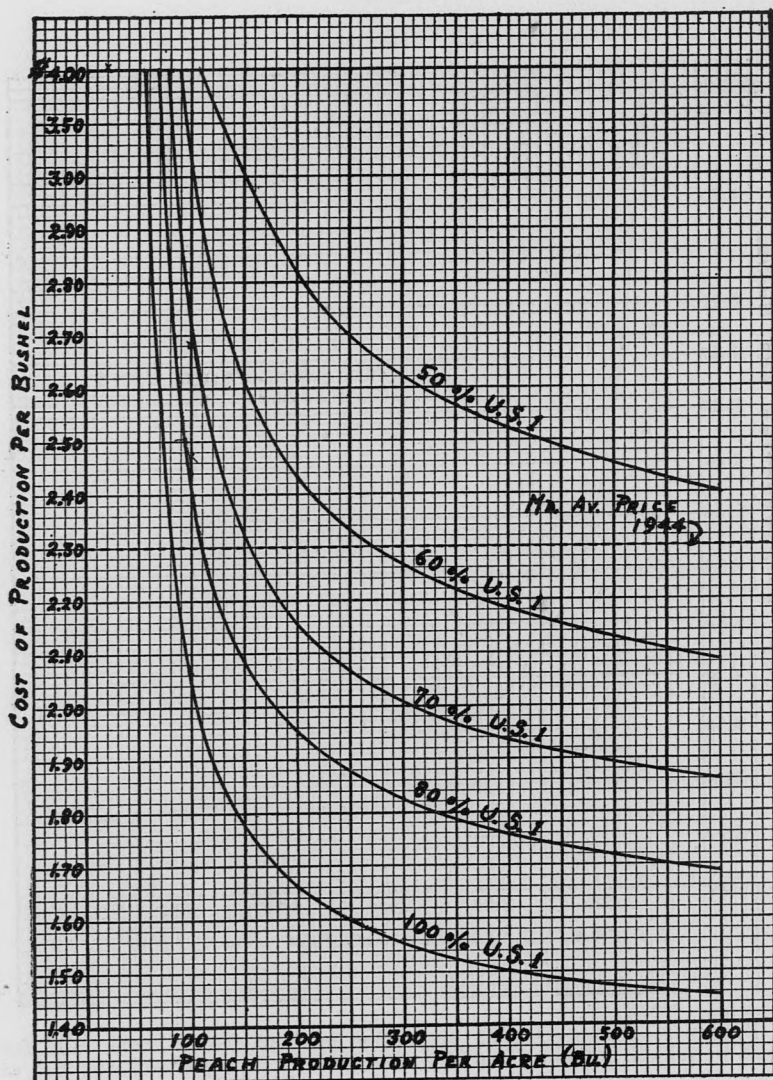


FIGURE 4—Approximate curves showing relationship between cost of production and yield for peaches in Maryland and how this relationship is affected by varying percentages of U. S. No. 1 fruit, assuming all off-grade fruit on the average is sold at a loss. All curves are calculated from certain assumed additional costs and losses, using actual costs of 1943 as a base. Maryland average price for 1944 is a figure released by the Bureau of Agricultural Economics, U. S. Department of Agriculture.

investment and losses on unpacked fruit to represent the average cost per bushel. As shown in Figure 4, the losses on unpacked fruit make very large increases in cost per bushel of packed fruit; in fact, larger increases than with apples, as it was estimated that the average price obtained for cull peaches would be only 50c per bushel. Thus, for 150 bushel yield of peaches per acre, an average cost per acre would be as low as \$1.77 if no culls were produced, but would rise to \$2.09 for a crop with 80% packed fruit U. S. 1; \$2.32 for a 70% pack; \$2.61 for a 60% pack; and \$3.10 for a 50% pack of U. S. 1 fruit.

To reduce cost per bushel by increasing yield per acre, it is apparent from Figure 3 and 4 that a grower should strive to get at least 175 bushels per acre, as one can note at least a 30c reduction in cost per bushel as yield rises from 100 to 175 bushels per acre. The effect of percent of cull fruit is seen strikingly as one considers the yield necessary to break even with the Maryland average price of \$2.30 for 1944. Thus, with 80% U. S. 1 fruit, a yield of 110 bushels was needed; with 70% pack a yield of 155 bushels was necessary; with a pack of 60% a yield of 270 bushels was essential; and with a pack of 50% of U. S. 1 it was not possible to break even with 600 bushels per acre.

As with apples, the efficient use of labor will also make itself felt in reducing costs per bushel for growing, picking and packing, shown in Table II, which assumes greater importance as the wage rate rises.

The item of depreciation per acre on equipment, buildings and trees shows up larger in Table II for peaches than for apples, possibly due to smaller average size of orchard for peaches, 55 acres versus 125 acres for apples. Again, growers should not count profits without consideration of this large item of depreciation.

Conclusions

As stated before, the cost data submitted herein are not given to show costs in detail, but rather as a guide to production factors that influence such costs. The curves drawn from the survey data are essentially correct as to shape of the curves, but could be shifted to meet 1944 or 1945 costs by adjustment for increased grower costs for those years. The essential features do emphasize that (1) yields of 200 bushels of apples and 175 bushels of peaches per acre are the minimum goals for production to bring costs per bushel down within safe margin for possible profits, and (2) the production of a high percentage of U. S. 1 fruits is essential, as the loss on off-grade fruit means the equivalent of a great reduction in yield, as far as cost per bushel is concerned. From a practical operation standpoint, certain orchard operations, purchases and services can be watched carefully to reduce costs and with this in mind the following so-called efficiency factors can be listed, based upon discussions with growers:

1. Labor.

- (a) Better supervision, training, and relationships between employer and employee.
- (b) Better equipment to save on labor and loss of man-hours.
- (c) Improved tenant houses to keep key men.
- (d) Adequate pay for good help.
- (e) Use of cold storage facilities at the orchard to extend the packing period and make best use of limited help for harvest and reduce loss from drops.

2. Yield increase per acre.

- (a) Soil improvement with covers, fertilizers, moisture conservation, etc.
- (b) Care in selection of new areas for planting—examine depth and character of soil to insure a minimum of 3 feet of soil for tree roots.
- (c) Distance of planting—do not plant more than 75 peach trees per acre and reduce number for poorer soils. Apples should be at least 36' by 36' and preferably 40' by 40'.

3. Increase percentages of U. S. No. 1 fruit.

- (a) Improved spraying to get adequate coverage at proper time.
- (b) Improved handling in harvest and packing to reduce bruising and injuries. A small cut in an apple means a rotten apple in storage.
- (c) Better pruning and thinning of fruits.

4. Material costs.

- (a) Careful buying of the right materials at the right price. Use materials found to be successful by research rather than by hearsay or promotion.
- (b) Buy packages, fertilizers, and spray materials early.

5. Overhead costs—interest and depreciation.

- (a) Watch this item so that it does not make up a large item per acre. This means economy in outlay for building, equipment, and tree purchase. But do not buy cheap, worn-out land.

6. Improved field service by state and federal agencies.

- (a) This is an annual need for the fruit grower.

DID THE NATIONAL PEACH COUNCIL PAY DIVIDENDS?

CARROLL R. MILLER, Secretary-Treasurer National Peach Council,
Martinsburg, W. Va.

You will remember that in early 1943, OPA called a series of regional meetings of peach men, at Charlotte, N. C., and four other places, to get the growers' and handlers' views on peach ceilings.

At each of these five meetings, OPA received a different set of wishes as to ceilings. So, since the growers couldn't agree, OPA did about as it pleased.

Obviously, the tactics were against the growers. National Peach Council determined that this should not happen again, if we could prevent it. Just about one year ago, we issued a call to the leaders of the peach industry to get together and "carry the ball" ourselves in 1944.

We arranged a meeting with OPA in early February, and five of us spent two days with OPA at Washington, studying what they had to offer, and acquainting them with our needs. It was fairly clear then that OPA's ideas for a peach ceiling were around \$3, F.O.B.

The five of us, plus a couple of OPA men, carried this data to St. Louis in late February, where National Peach Council had arranged the first nation-wide gathering of peach men ever to assemble, so far as we know. We had 18 peach states; representing 77 percent of the U. S. peach crop.

The St. Louis Conference adopted, after long discussion, a national peach program; for ceilings; for support programs; for some other problems.

In ceilings, we asked for a \$4 top, F.O.B. We asked that weighing and stamping be abolished; asked a couple of other improvements over the ceilings then in force for other fruits. The Peach Industry agreed upon these. Let me repeat that OPA's ideas were for about a \$3 ceiling at the time.

The Fresh Peach Industry Advisory Committee was formed a little later. The National Council was consulted freely in naming this Committee. Most of the Industry Committee had taken part in the St. Louis meeting. The Industry Committee, and the National Council's officers, worked right straight down the line for the St. Louis program; with OPA, WFA and the Government bodies concerned.

You know the results: a \$4 ceiling for the freeze-hit South; \$3.66 per bushel, F.O.B. for the other Eastern states; no weighing-and-stamping required; in fact, the simplest and best ceiling order yet written. Compare that \$3.66 F.O.B. for peaches with \$2.78 for apples: \$2.15 per bushel for oranges; \$1.57 for grapefruit. It is clear that the

Industry Committee and leaders did an excellent job. Peaches are the most perishable of all major fruits. For many reasons familiar to all of you, they require a higher ceiling than the more stable fruits with longer marketing seasons. But, those facts had to be developed to OPA.

That was the No. 1 job done by National Peach Council in 1944. The Council was almost wholly responsible for the practical, reasonable, single program adopted by the industry; the program which all hands got behind, and pushed; and obtained, practically speaking. Has the National Peach Council paid dividends? You figure it up.

But we had some 75 million bushels of peaches coming on. It wasn't enough to have a good ceiling. Those 75 million bushels were a huge crop. There was plenty of potential trouble ahead in marketing them.

The National Peach Council called together, at Philadelphia, key men from the biggest grocery-store outfits in the East: American Stores, Safeway, A. & P., Krogers, Pennsylvania State Grocers—such organizations as that. We fed them well; then told them, effectively, *when* the peaches were coming; *where* they were coming from; when to be ready for them in greatest volume; and the profits to *them* in handling a big volume of peaches for *home-canning*. It was a good meeting. We followed it up with letters and bulletins. We supplied them with natural-color peach posters. It all helped, considerably, in the very, very effective job which the retailers did last Summer with that big crop of peaches.

The National Council did a lot of other smaller jobs. Those two were the biggest. Did the Council pay dividends in 1944? Well, the work was done on a total income—to the National Council—of three thousand eight hundred dollars. That \$3,800 is the sum of the state-members' fee payments—\$100 for the smaller peach states (less than one million bushels); and \$300 for the larger peach states (over a million bushels production).

We couldn't have operated on anything like that \$3,800, normally. We used peach posters left over from 1942. No salaries were taken by anybody for doing the peach work. Next season, we've got to have new posters; and some of these times we're going to have to pay salaries, of course.

But, for 1944, we got along on \$3,800. We'll have something left over, as a nest egg for next season, in fact. Dividing that \$3,800 into the 75-million bushel peach crop, which the revised USDA records say we had, shows that the National Council cost *less than one-hundredth of a cent per bushel*, for the national crop—one hundred bushels for one cent! Did the National Peach Council pay dividends?

I want to report briefly, too, on Appalachian Division of the National Peach Council. That is our 4-state group; the same area as with Appalachian Apple Service. A number of you peach growers here are paid-up

members, at one-half cent a bushel. Several of you chipped in more than the half-cent—bless your hearts. Did Appalachian Division of The Peach Council pay dividends?

A big job, and a perpetual job, for peaches is this—the Public and the Retailers, must be told each year, *every* year, *when* peaches are coming; *where* they are coming from in most volume; what the varieties are best suited for, and such things. For peaches are “The Forgotten Fruit.” Nine long months each year stretch between peach seasons. The housewife gets her first peaches in July; her last in late August, over the East generally. From September to July, nine months, the public and the retailers never hear of fresh peaches. In this day of a thousand foods and a million distractions, nine months is a long time. They forget about peaches. They have to be told about them again, each Summer. That is one of the basic things in marketing peaches, we have found—the ignorance of both Mrs. Consumer and Mr. Retailer as to the when, where-from and what-for of peaches.

To inform the retailers was the reason for the Philadelphia conference held by the Council, of which we spoke earlier. Informing the Public is a larger job. It can be partly done by the retailers; but we cannot—and should not—depend on them.

So, with last Summers’ big crop coming on, we took \$2,500 worth of newspaper space and radio time up and down this Appalachian marketing area to tell the public, first, that our “tree-fresh” peaches will be in the stores in a few days; and then, “They are here!”

We took double-column space, 4 inches deep, twice a week for 2 weeks, in 21 dailies, and 1-minute “spots” on 25 radio stations, in 15 cities—starting with Roanoke, Va., Charleston and Bluefield, W. Va., about August 1st—moving right up the best as the bulk of the harvest went to market—Charlottesville, Richmond, Pittsburgh, Martinsburg, Hagerstown, Baltimore, Washington, Philadelphia, Chambersburg, Harrisburg, Reading and Allentown. The last ads went into the Reading and Allentown dailies and radio stations on August 28 and 30. We marched right up the Belt as the peaches came on in volume. We heard a lot from the program. Unquestionably, it helped. The housewives arranged with their grocers for canning peaches.

It cost us just about \$2,500, with some accompanying emphasis in the grocers’ trade magazines. It is paid for. Those peach growers of this 4-state belt who are carrying this Industry job paid in about \$3,500. Nobody took any salaries—excepting Mrs. Lewis, Appalachian Apple Service’s home economist, who turned her attention and competent energies to peaches for two months and was paid \$200 therefor. So, we have a little nest-egg, a few hundred dollars; something to start work on next season—or when we really need it. We can’t do the job as cheaply another season. We are now out of posters; must have some

more of these. We cannot expect much longer to get the job done without paying somebody some salary.

I spoke of "next year's work." That brings up something. Have you stopped to realize that this Summer we just narrowly missed a 90-million bushel peach crop? We had 75 million bushels, says USDA. The freezes over the South took at least 10 million. The drouth over the East and Midwest cut a quarter-inch from packing size, and reduced the crop by almost another 10 million bushels. So, except for the rough but wise hand of Old Mother Nature, we would have had 90 million or 95 million bushels, instead of 75 million.

What does 90 million bushels mean? We can cut off 30 million bushels (that's the outside limit) for commercial canning. That leaves 60 million "fresh." Perhaps 20 million of that 60 are either Southern or Northern peaches; marketed before August 1st or after September 1st. That leaves about 40 million bushels of fresh, highly perishable peaches to be sold in the 27 week-days of August. That, my friends, means one million four hundred thousand bushels of fresh peaches to be sold every week-day during August!

We have never marketed that. Last Summer, we averaged to market just a little better than one million bushels per day during August: about 28 million bushels in 27 week-days.

Nature won't always step in and save us. Some of these seasons we're going to have 90 millions, or 95, to market. The ten-year average peach crop has been 58 millions. The average for the coming ten years will be away above that; perhaps 70 million bushels. Are you going to have your markets ready when the peaches come? Or are you going to sit and *hope*; hope for a bad freeze somewhere *else*; hope for a Government hand-out; hope that the public, and the grocers, will buy them? The market-building machinery is ready. It needs only fuel—your half-cent per bushel. You can have it or not. It's up to you.

But remember: Peaches are the "forgotten fruit." The public and the retailers must be educated about them each summer. And only home canning will use peaches in large enough quantities to get 70 million bushels over the counter at decent prices. The coming season price trend in OPA is downward. The 1945 ceiling is another big problem ahead.

QUESTION BOX

Submitted by Growers

What is the effect of price ceilings?

John Chaulder, National Apple Institute: There seems to be little benefit except as an inflation control. Ceilings are discouraging good packs of apples and they deter the moving of ordinary run of apples. We have built up a rather good pack and have tried to attract custo-

mers. When price control came in, it showed that we were going to extra expense in packing our crop, as common packs brought the same price, and even bulk apples brought the same price as packed fruit. This year there is some difference, as only the best apples are at ceiling and in demand. These apples are under a normal level and are scarce on the market at present. In New England, we developed a special trade for McIntosh apples packed in a cell carton. These packs weighed 38 pounds but brought the bushel price plus 25 cents premium. Now this trade is gone, as this is not considered a standard pack so it must be weighed and stamped. We have now gone back to other packs. Now the ordinary apples are so close in price to the best grades that nobody wants the ordinary apples. The housewife buys either good apples or she buys none. We would be much better off with a grade-basis price ceiling. The low grade apples come to market with a high price-spread. Grocers handle a lot of low grade apples and in these days when the housewife doesn't shop around she either buys apples at one store, and if the fruit isn't of the quality she wants, she doesn't buy any apples. Also, there is more consumer money to spend and people don't want apples of too poor grade. The National Apple Institute fought the ceiling price set-up, asking for a good retail price, letting the grade prices fall in at their proper levels and allowing no specific mark-ups as we now have. Growers and the public would be better off without price ceilings. Since the prices are so nearly set on the various grades, growers have been packing and mixing grades and in many cases they are packing *down* to the ceiling price. Some packs are so mixed in grade that they amount to tie-in sales, where the customer is forced to take a certain number of poor apples to enable him to purchase some good apples.

What is the future of frozen apples and peaches?

A. L. Schrader: There has been a steady expansion of the frozen fruit industry and peaches show future promise for expansion. According to U. S. Bureau of Agriculture Economics, approximately 240 million pounds of fresh peaches were frozen in 1944, a 9 per cent increase over 1943. Although a considerable amount of apples are now being frozen under wartime conditions, we are not certain of the future for frozen apples. There should be some possibilities of increased commercial peach canning in the South, as it is estimated that after the war, canners could pay one dollar a bushel for canning stock and do a profitable business. It would require about 500 acres of peaches to furnish sufficient stock for running one canning plant.

Are good cannery prices spoiling the grower?

Lloyd Balderston: In my opinion, any outlet for poor fruit may spoil our efforts to produce good packs of apples.

Do we need more processors?

J. A. Cohill: Right now, we could say that we need more processors, but under ordinary conditions, we have sufficient canneries to care for our cannery grade apples. In our past poor years we swamped the canners with cannery stock. At present, there are thousands of bushels of under-grade apples in storage that will never find a home in the fresh market, and I believe that growers would be smart to move a lot of this stuff out of storage to the canneries, if the canners can take them. Maybe we had better forget the past few good cannery years and get back to growing and packing good apples.

What income tax pointers should a fruit grower have?

W. P. Walker: Probably a few remarks regarding income taxes as they apply to fruit growers will be of interest:

Two farmers may have the same net income over a period of 20 years, but the income of one may be rather constant while that of the other fluctuates. The one with a fluctuating income will pay from 25 to 100 percent more income tax than the other. Unfortunately, fruit growers fall in the class of farmers with fluctuating incomes. The lesson in that plain fact is obvious and it has a significant bearing on the necessary reserves for orchard operation.

Fruit growers can reduce the excessive tax due to fluctuating income by:

1. Adopting that form of record keeping—either cash, modified cash or accrual—which will best spread yearly income more evenly.
2. Making heavy purchases of non-depreciable supplies at times of maximum income.
3. Giving your support to legislation which will permit carrying losses effectively both backward and forward for three years, or to other types of legislation which will ease the excessive tax caused by fluctuating incomes.

Farmers should be sure to inquire about and utilize all of the income tax provisions which will legally decrease their tax liability, such as:

1. Separate returns of farmer and wife; for a wife can claim her proportional income from the farm if she can establish that she actually contributed capital or services to the farming business separate from her home duties, and if she actually receives the income.
2. Capital gains income from the farm enterprise, such as from the sale of timber, wood, livestock, machinery and other depreciable property used in the business. If you can report such income on the basis of capital gains instead of current income your tax on such income will be cut in half.

Be realistic when you charge off depletion or depreciation costs concerning your orchard property. It is proper to include as an expense depletion based on the actual cost of developing the orchard over and above the cost of the land. But, you are risking future embarrassing questions by the Bureau of Internal Revenue by making the following mistakes:

1. Assuming a fictitious value for an orchard in arriving at depletion or depreciation costs, and including land values in the depletion cost base.
2. Charging off depletion or depreciation on your orchard when all of the costs of developing the orchard have been previously included in current expenses.
3. Including assumed interest on your developing cost or your capital investment. Interest actually paid on borrowed capital is the only interest cost deductible for income tax purposes.

Are farm cold storages practical?

R. C. Shaw: From my experience with a farm cold storage, I would say "yes." We fill our storage two or three times a year. It lengthens our peach season, and has actually saved the crop, some seasons. The per bushel operating costs are low.

W. W. Moore: I would also say, "yes." We used to haul our fruit to Washington, then haul it back to the orchard for roadside sales. Now, we have less waste and lowered costs.

M. T. Heaps: Our cold storage is 5 years old. I feel that nothing could be done by a grower that would safeguard his investment as much as a storage.

Can we get more machinery and packages next year? What's new in consumer packages?

It was felt that the new machinery supplies for 1945 would be very limited.

J. M. Faulkner: The package situation for 1945 looks bad. Logs are scarce. Labor is ample, but material is really tight. We expect a decreased package production and advise growers to get as many used packages as possible and also to order their new packages immediately and take a chance on getting at least a portion of them. In the line of new packages, there is a raised stave basket with flat cover. This package is new and needs trial. A limited supply of samples of this new package is available.

ADJOURNMENT

**REPORT
OF THE
THIRTY-EIGHTH ANNUAL MEETING
OF THE
Maryland Crop Improvement
Association
Baltimore, Maryland
January 10, 1945**

**INFLUENCE OF FERTILIZER ON CROP YIELDS AT DIFFERENT
LIME LEVELS**

By DR. R. P. THOMAS, Professor of Soils, University of Maryland

This is a preliminary report of some field plot work on one of the University farms. The object of this plot work is to obtain the crop responses to several fertilizer grades under different lime treatments or lime levels.

Since it was possible to lay out three series of plots on fairly uniform Beltsville soil, a three-year rotation was adopted. This originally was corn, barley and hay. After three years the barley was changed to wheat because of unsatisfactory barley yields. Each plot is divided into thirds so that the lime treatments can be made across each plot. The first third of each series was limed to a pH value of 5.5; the second section, called "B," to a pH of 6.5, and the third, or section "C," to a pH of 7.5. There are sixteen different fertilizer treatments in triplicate on the 54 plots of each series. The nitrogen varies from 0 to 6 percent, the phosphoric acid from 12 to 24 percent and the potash from 6 to 16 percent. Fertilizer applications have been made only to the corn and grain crops. These two crops received a total of 900 pounds. This gives an average of 300 pounds of fertilizer for each year. The fertilizer is applied every time these grain crops are seeded. The lime applications, to reach the respective pH values, have never been more than 2 tons at any one time and this only on the high pH value sections. The original pH value of the soil was about 4.9 and the fertility level very low. It took on the average $1\frac{1}{2}$ tons of ground limestone, or its equivalent, to reach the pH value of 5.5. The "B" or 6.5 pH value section required on the average $2\frac{1}{2}$ tons. The "C" or pH value of 7.5 section required on the average about 6 tons of lime. A mixture of, or alternate uses of, both high calcium and magnesium limestone was made to supply both calcium and magnesium to the soil. The first crops were harvested in 1940.

The individual crops responded differently to the various fertilizer and lime treatments. This is partially shown by the data in Table I and the graphs in Chart I. Yields for the different fertilizer treatments at the three lime levels are not given separately because of the large amount of space which would be required. Only the average yield of all fertilizer treatments is given in Table I. Likewise, the data used for the graphs are only the averages of all fertilizer treatments. In these graphs the "A" section, or low lime treatment, yields are taken as 100 percent and are indicated by the heavy solid line labeled "A." As the medium and heavy lime treatments increased or decreased, the yields above and below the low lime treatment are expressed on a percentage basis in terms of the low lime treatment. The dotted line is for the yield trend of the high lime treatment and is labeled "C." A broken line with the letter "X" across it is used to denote the yield trend of the medium lime treatment and is designated by the letter "C." There is a graph for each crop and an averaged one for all the crops.

Corn did not show much response to lime. The average yield of corn for the five years was practically the same for all three lime treatments. Some of the separate fertilizer treatments did show slightly different results. When the nitrogen was low and the minerals high in the fertilizer, the heavier lime treatments gave the better yields. When the nitrogen was increased in the fertilizer, there was little difference between the yields for the three lime levels. This was specially true when the heavier nitrogen applications were accompanied with more phosphoric acid and potash. With most of the fertilizer treatments the medium lime applications gave the highest corn yields. These increases were usually so slight that these medium lime treatments were not economically feasible. The lower yields in 1944 on the heavy limed sections were thought to be due to the rank growth of sod plowed under late and then followed with a drouth. On the "B" section there was much less growth plowed under. On the "A" section there was very little to plow under. It would seem that corn is a crop which shows little response to lime, but gives a good response to fertilization. This is just the opposite from the general farm practices. Usually the farmer applies his lime to his corn ground and his fertilizer to the small grain soil.

Barley gives an entirely different picture regarding the use of lime and fertilizer. After the depressing effect of the first year, the medium lime application gave a good increase and the heavy lime a very good increase. The barley yields increased along with the nitrogen treatments at all three lime levels. The heavy lime and nitrogen treatments produced the highest yields. Use of a fertilizer high in phosphoric acid and potash also yielded better with all three lime treatments. Barley seems to respond well to lime, especially when fertilized liberally. Likewise, unless there was sufficient lime present, fertilization of barley was not profitable.

The two-year results with wheat are slightly different from that which was obtained from barley. Heavier lime treatments were not as high

yielders as the medium lime treatments. However, the more concentrated fertilizer the better the yields that were obtained for the heavier lime treatment. Wheat, on the whole, did not respond as well to concentrated fertilizer as barley. The increase obtained with the medium lime treatment would indicate that wheat definitely needs lime. Where wheat is fertilized heavily in order to have residues left for hay, lime should be used if it is needed.

The hay crops were similar to that of barley. Highest yields were obtained by the heavy lime treatments, although the increase due to heavy lime treatments was not much more than that for the medium amounts. The fertilizer with the highest concentration of phosphoric acid and potash gave best yields. In all probability this was due to the stimulating effect which potash has upon legumes. It was noted in nearly every case that the high potash treated plots contained more legumes in the hay mixture. Nitrogen seems to have little effect upon hay yields. However, there is an indication that if the mineral level is high enough, and there is ample lime, phosphoric acid and potash, the use of nitrogen for hay may be quite profitable, even though the hay mixture may be mostly legumes. The use of mineral fertilizers and lime seems to go hand in hand. When one is increasing without the other there seems to be little increase in yields. Small amounts of lime give little increase in hay regardless of the fertilizer used. Hay seems to be a crop which responds well to liberal quantities of both lime and fertilizer.

From the results obtained in this study so far, it would seem that barley and hay are two crops on which lime can be used liberally providing enough fertilizer is used or is already present in the soil. The universal practice of applying lime almost entirely on the corn land before that crop is planted may not be the best place in the rotation for lime applications. This is especially true if heavy applications of lime are made in order to build up the lime reserve for clover and similar hay crops. It would seem that the best place in the rotation to apply lime would be just previous to hay and on grain crops like barley and wheat. Results of this study to date indicate that the lime policy adopted by the Agronomy Department several years ago may have been the correct one. The recommendation for use of lime in Maryland has nearly always been for small amounts and more frequent applications instead of large amounts and infrequent applications. There has been an exception for crops like alfalfa. Even with this crop, the recommendations have been to split the applications of lime in which one application is plowed under and the other part applied after plowing. Results so far indicate the importance of maintaining a balance in correcting soil deficiencies. Using lime and fertilizer without much regard to the other may not be the most profitable or economic use. Although the discussion has been confined very largely to the use of lime and usual fertilizers, the same conclusions can be applied to the benefits which might be expected from organic matter and minor elements.

Fig. 1—The Percentage Increase or Decrease of Medium and High Lime Treatment as Compared to Small Lime Treatments for Corn, Barley, Hay, and Wheat.

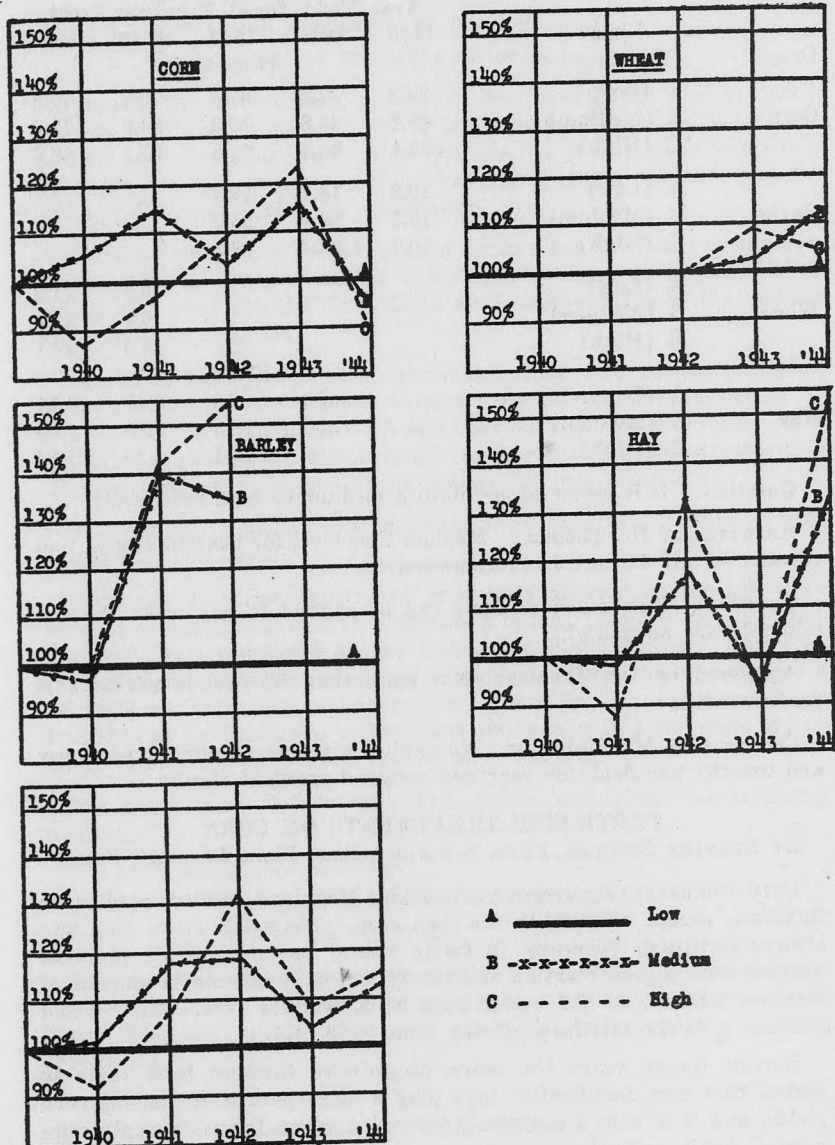


TABLE I. AVERAGE YIELDS OF ALL FERTILIZER TREATMENTS FOR THE LOW (A) MEDIUM (B) AND HIGH (C) TREATED LIME PLOTS FOR CORN, BARLEY, WHEAT AND HAY.

		Aver. Yields for all Fertilizer Treat.				
Crop	Lime Treatment	1940	1941	1942	1943	1944
		(Bushels)				
Corn	A (Low)	38.2	32.2	67.8	20.7	76.3
	B (Medium)	40.3	36.8	70.3	24.0	72.3
	C (High)	33.1	29.6	73.8	25.6	68.6
Barley	A (Low)	10.8	18.7	18.7	-----	-----
	B (Medium)	10.5	26.1	25.2	-----	-----
	C (High)	10.7	26.4	28.8	-----	-----
Wheat	A (Low)	-----	-----	-----	9.2	21.3
	B (Medium)	-----	-----	-----	9.4	23.9
	C (High)	-----	-----	-----	10.0	22.1
		(Tons)				
Hay	A (Low)	-----	.98		3.47	1.21
	B (Medium)	-----	.96	1.15	3.28	1.60
	C (High)	-----	.86	1.31	3.23	1.84

Question: Is it better to maintain a medium or high lime level?

Answered by Dr. Thomas: Medium lime level for general crops. Soil reaction of pH 6.5 to 7.0 is recommended.

Question: How much nitrogen can be applied to hay when the soil minerals are adequate?

Answered by Dr. Thomas: Not more than 50 pounds per acre is recommended.

Comment by Mr. Mullinix: We applied nitrogen on our mixed clover and timothy hay field this year and obtained excellent results.

FERTILIZER TREATMENTS ON CORN

BY STANLEY STABLER, Farm Superintendent, Plant Research Farm

Until comparatively recent years many Maryland farmers applied no fertilizer, except manure, to the corn crop. The small grain crop was always fertilized, generally in fairly liberal amounts. This practice, coupled with a good rotation and the return of a reasonable amount of manure, maintained the better soils at a fertility level which would produce a fairly satisfactory corn crop.

During recent years the more progressive farmers have come to realize that corn fertilization may play a large part in increasing corn yields, and it is now a common practice on many farms to apply commercial fertilizer to the corn crop.

There are several methods of applying fertilizer to corn:

1. Broadcast application before plowing.
2. Plow sole application at plowing.
3. Broadcast application before planting.
4. Row or hill application at plowing.
5. Combinations of the above methods.

Probably the most common practice in Maryland at the present time is the row or hill application of 100 to 200 pounds of 2-12-6 with the corn planter at time of planting. This practice has been used satisfactorily by a great many farmers. Others have used larger amounts and the same or different methods of application.

In these times, when there is such a demand for maximum production, the question naturally arises as to how far one may go in corn fertilization and what are the advantages and disadvantages of the various methods of fertilization.

Results of tests in the mid-west indicate that with adequate rainfall on land where additional plant nutrients are needed, applications of up to 1,000 lbs. per acre of an 8-8-8 fertilizer have proved profitable. Is it profitable to go that far in Maryland? Is it profitable to side dress with a nitrogen fertilizer? Is planter application the best procedure?

With the above questions in mind the University ran a series of tests during the 1944 season.

Since any fertilizer experiment is greatly affected by the soil upon which it is being conducted, it is necessary to first consider the soils used. The tests were conducted on the University Plant Research Farm, on two different type soils. One, which we designate as heavy soil, was a Beltsville silt loam in a moderate state of fertility. The other, which we designate as light soil, was a Sassafras sandy loam in a low state of fertility. Duplicate plots were run on each location.

The areas were divided into three blocks and given the following treatment

1. Nothing plowed under.
2. 150 lbs. ammonium nitrate plowed under.
3. 700 lbs. 7-7-7 plowed under.

The corn was planted across these blocks, one-half of the plots receiving 200 lbs. 2-12-6 with the planter and the other half no planter fertilizer. The two groups were each given the following side dressing treatments

1. No side dressing.
2. 75 lbs. ammonium nitrate side dressing.
3. 150 lbs. ammonium nitrate side dressing.

The side dressing was done when the corn was about 18" high, and it was applied with the fertilizer box on the corn planter by driving the planter straddle of a row with tubes turned to the side so that the fertilizer came out right along the row.

The 1944 season was dry, May, June, and July each having only about 50% normal rainfall.

The corn which was planted May 20 came up reasonably well on the heavy soil, having approximately an 80% stand. On the light soil, however, the stand was so poor that we had to replant. We noted before replanting that the plots which had had fertilizer applied with the planter had not more than a 25% stand, while those which had not had planter fertilizer had a 65% stand. This is an unusual response as there is seldom any danger of germination damage by the use of fertilizer with modern planters. However, it is a possible danger on light soil in a dry season. The replanting was benefitted by a rain and a satisfactory stand was secured.

Results of the plow under treatments are given in the following table:

Planter treatment	Plow Under Treatment		
	None	150 lbs. amm. nitrate	700 lbs. 7-7-7
LIGHT SOIL			
None	41.4	44.4	58.7
200 lbs. 2-12-6	32.3	35.8	49.9
HEAVY SOIL			
None	40.8	57.8	67.1
200 lbs. 2-12-6	44.3	61.0	64.0

It is evident that there is a definite benefit from plowing under ammonium nitrate and a still greater benefit from plowing under the 7-7-7. With corn valued at \$1.00 per bu. and a cost of \$4.50 per acre for the ammonium nitrate and \$10.50 per acre for the 7-7-7 it can be seen that either of these applications would be profitable but there would be more profit from the use of the 7-7-7. There is also considerable residual benefit to succeeding crops from this type of application.

There was a decrease of about 9 bu. per acre on the light soil by use of planter fertilizer, but a slight increase by use of planter fertilizer on the heavy soil. It is assumed that the planter fertilizer stimulated early growth and to a certain extent localized root development, which action had a subsequent detrimental effect in the dry, sandy soil. On the heavier soil the planter fertilizer showed some benefit and undoubtedly for most seasons and conditions it is a sound practice. The better the soil, the more benefit may be expected from the early stimulation.

Results of the side dressing are given below:

LIGHT SOIL

Planter treatment	None	Side Dressing	
		75 lbs. Am. Nit.	450 lbs. Am. Nit.
<i>Nothing Plowed Under</i>			
None	41.4	40.8	42.3
200 lbs. 2-12-6.....	32.3	42.2	46.6
<i>150 Lbs. Am. Nitrate Plowed Under</i>			
None	44.4	42.6	42.5
200 lbs. 2-12-6.....	35.8	44.6	45.6
<i>700 Lbs. 7-7-7 Plowed Under</i>			
None	58.7	51.4	46.1
200 lbs. 2-12-6.....	49.9	45.4	46.3

HEAVY SOIL

Planter treatment	None	Side Dressing	
		75 lbs. Am. Nit.	150 lbs. Am. Nit.
<i>Nothing Plowed Under</i>			
None	40.8	56.3	50.2
200 lbs. 2-12-6.....	44.3	50.1	56.6
<i>150 Lbs. Am. Nitrate Plowed Under</i>			
None	57.8	63.4	57.4
200 lbs. 2-12-6.....	61.0	55.8	55.9
<i>700 Lbs. 7-7-7 Plowed Under</i>			
None	67.1	52.8	57.5
200 lbs. 2-12-6.....	64.0	49.5	59.0

Side dressing with ammonium nitrate showed little effect. Nitrates tend to be carried to the surface in dry weather and are not easily available to the plant roots. In a more favorable season greater benefit might be expected.

In summarizing, we may make the following general conclusions:

1. There are distinct advantages from plowing under fertilizer, particularly a balanced fertilizer. Results from other stations indicate that these benefits are even more pronounced when applied in bands on the plow sole.

2. Planter fertilization may sometimes be harmful; occasionally by damaging germination and also by decreasing yields when there is not sufficient moisture or nutrients to carry the stimulated plant to maturity. This is true only under unfavorable conditions. In most cases the use of planter fertilizer, either alone or with plowed under applications, has been beneficial.

3. Nitrate side dressing did not prove beneficial in a dry year.

Question: How old was the corn when you side-dressed it with ammonium nitrate?

Answered by Mr. Stabler: A little over a month. The planter would just straddle it without breaking the corn.

Question by Mr. Carmichael: How deeply was this land plowed?

Answer by Mr. Stabler: About 6 inches deep.

Question: What was the humus condition of the soils?

Answer: Plenty poor.

Comments by Marvin Lowe: My corn seemed to withstand the drought better where I plowed under fertilizer. The corn had more ears and the yield was somewhat higher.

TENTATIVE RESULTS FROM ROTATIONS AT COLLEGE PARK

BY DR. WILLIAM B. KEMP, Director of Experiment Station

In any statement concerning crop rotations precautions must be exercised, due to the fact that many crops show decidedly different relative performances on different soil types. Notes of some years ago on outlying soil fertility plots carried on by the Experiment Station show that in different parts of the state responses were decidedly different from various crops. On soil of the Elkton type, the area of land which produced one bushel of wheat produced one and one-half bushels of corn. On soil of the Sassafras type, the area which produced one bushel of wheat produced two and one-half bushels of corn. On the land of the Chester-Manor type, one bushel of wheat was produced on the same area which produced 3.7 bushels of corn. Similarly, the amount of nitrogen which can be used in a spring top-dressing on small grain differs in response to soil type and past soil treatment. On the coastal plain soils, one pound of twine will tie up an amount of wheat which will thresh out about ten bushels. On soils of the Piedmont Region, one pound will tie up about seven bushels of wheat.

As an illustration of different response on different soil types, I cite the comparative yields of wheat and barley on the old and new plant research farms at College Park. On the old farm, barley regularly produces more total digestible nutrients per acre than wheat. On the new

farm, wheat produces twice as much digestible nutrients per acre as barley. With these precautions in mind, let us look at some of the yield results on a Sassafras loam soil at College Park.

Cover Crops

Among the various cover crops planted in corn, rye and vetch appear to be more promising than any other covers, due to the fact that a stand is likely to be obtained even under dry conditions. If this cover crop is planted at the last cultivation of corn, much of the rye is likely to joint in the fall and be killed by the winter. When this combination is planted after the corn has been harvested, a full stand of rye is secured, but only a small amount of vetch persists.

Crimson clover has not been as promising as rye and vetch. However, these plots have been so situated that they can be compared directly with plots where no cover has been used. Results show an increase of 4.6 bushels of corn, resulting from the crimson clover cover.

It has not been equally easy to obtain a stand from all legumes when planted in the spring in a field of fall seeded small grain. In order of certainty of a stand, lespedeza has come first and alfalfa second. All of the clovers have shown a greater irregularity of stand than these crops. Stands of sweet clover have been particularly poor. Failure in obtaining stands of sweet clover probably has resulted from the fact that lime needs have been supplied gradually and probably not enough has been used.

Forage Turned Under

Some studies have been conducted to determine the effect on succeeding small grain or corn of straw or stover which is turned under. Where wheat has followed wheat, straw from the preceding crop has had a detrimental effect on the following crop, if the summer was dry. The effect has been beneficial, if the summer was wet enough to permit sufficient decomposition of the straw. During all four years an average of .2 bushels has been shown from the straw. Also, where corn follows corn, stover has showed greater benefit on the succeeding crop in a wet season than it has in a dry one. The average increase in yield where the stover has been turned under is 7.9 bushels.

Where wheat follows wheat, lespedeza planted at the rate of 25 pounds per acre in the first wheat crop has added 6.7 bushels of grain and 673 pounds of straw to the wheat crop which follows. One hundred pounds of nitrate of soda applied about April 1st as a spring top-dressing on wheat has added 6.7 bushels of grain and 792 pounds of straw to the crop. One pound of nitrogen in this topdressing has added, on the average, 25.1 pounds of grain and 49.5 pounds of straw.

On the same plots where both a barley crop and a lespedeza hay crop have been removed each year, some plots have been plowed and others

disced. Plowing has added 5.1 bushels to the barley crop on an average, but the amount of lespedza hay has been reduced following plowing. It is assumed that this reduction in the lespedza hay has resulted from the increased vigor of the barley crop in which it was started.

There is no crop that will produce as much feed per acre as silage made from either corn or soybeans and sorghum. A corn plant may contain about 75% of its total carbohydrates in the grain, about 5% is likely to be in the blades and top, and 20% in the stalk. When the grain is harvested, the carbohydrates in the stalk are lost. Only in silage are they utilized. When corn is planted for silage, not only is the planting thicker than when used for grain, but also a larger variety is likely to be used. Corn plots for silage have produced 12.2 tons per acre, while adjacent plots have produced 57.2 bushels of grain and 2,600 pounds of stover. The total digestible nutrients available in the silage was 4,924 pounds per acre, while those in the grain amounted to 2,660 pounds with 585 pounds in that part of the stover which is consumed. Where silage only has been produced, the biggest yield has been obtained by growing a crop of corn and one of wheat and vetch in the same year. Since the corn was planted late, it produced 9.6 tons per acre with 4.5 tons of wheat and vetch. The 14.1 tons of these two crops contained 5,076 pounds of digestible nutrients. Where silage and hay were produced, the heaviest yields have been produced when silage was followed by alfalfa. Some plots have produced 25.1 bushels of barley followed by 3,960 pounds of lespedeza hay as an average for each of four years. These plots have produced 2,290 pounds of total digestible nutrients plus 1,800 pounds of straw per year. In one year, when 200 pounds of nitrate of soda was used as a top-dressing, the grain yield was 49.1 bushels. A crop of soybeans which followed produced 3,097 pounds of hay. Thus, the total digestible nutrients equalled 3,438 pounds in addition to 4,900 pounds of straw.

At this point, I want to stress the fact that on many soils lespedza may not be an economical hay crop. However, where a hay crop is to follow a grain crop in the same year on one piece of land, it is very promising. In these comparisons I have used "Total Digestible Nutrients" so that direct relationships could be established between silage, grain and hay in feed production. It is convenient to assume that a profitable dairy cow consumes about 2,000 pounds of nutrients in pasture, 2,000 pounds of hay and silage, and 2,000 pounds of grain, which means that at least one-fourth of the grain must be purchased high protein feed.

On the plots under discussion a rotation could be provided which would produce nearly 3,200 pounds of total digestible nutrients per year in feed containing the desirable proportions of grain, hay and silage, together with a supply of bedding. There would be only two fields; one would be planted to corn, one-half in silo and one-half in grain; the other would be in barley with lespedza for hay planted in the barley. The part of

the field where corn was planted to grain might be planted to wheat in place of barley. If the supply of grain needed to be increased with some loss in the supply of hay, a top-dressing of nitrogen-carrying fertilizer could be used in the spring on a part or all of the small grain.

Question by Mr. Rutledge: Would location or elevation influence lespedeza yields?

Answered by Dr. Kemp: Annual lespedeza will not produce profitably and make seed in the higher elevations of the state.

Question by T. A. Mann: When do you seed the lespedeza?

Answer: About the middle of March.

NEW VARIETIES OF WHEAT AND BARLEY

By DR. R. G. ROTHGEB, Agronomy Department, University of Maryland

Three varieties of small grain, one of wheat and two of winter barley, recently have been added to the list of varieties being recommended for use in Maryland. The name of the wheat variety is Thorne and the names of the barley varieties are Wong and Kentucky No. 1. All have been grown extensively for several years in other states and for a shorter time in Maryland. They are "new" from the standpoint of having won recent official recognition, rather than from the standpoint of recent introduction.

Placement of a variety of small grain on the recommended list implies that the variety has demonstrated its worth for a specified area of production in the state. In Maryland, varietal recommendations for field crops are based on a consensus of opinion of the crops men on the staff of the Agronomy Department of the University. In this group the variety is examined from the viewpoint of the teacher, the research man, and the extension specialist. These men come to a decision after having evaluated the variety with regard to the following considerations:

1. Consistent field performance for at least three years as determined by official experiment station tests, local farm trials and observations, and out-of-state performance reports.
2. Superior or satisfactory field performance in regard to productivity, quality, disease resistance, winter hardiness, stiffness of straw, etc.
3. Economic need for the variety.
4. Availability of a reasonable supply of good seed, together with means for maintaining a supply of certified seed from year to year.

Thorne Wheat

Thorne is a selection from a cross between Portage and Fulcaster made by the Ohio Agricultural Experiment Station. The latter parent

is an old Maryland awned variety that is said to have originated near Hagerstown about 1886. Fulcaster continues to be one of the most popular and widely grown soft red winter wheats in the United States. A number of selections have been made from it. One of these is Mammoth Red, an awned variety still popular in parts of the state.

That Thorne has inherited many good qualities is indicated by its rapid spread since its release in 1937 by the Ohio station. It now occupies over half of the Ohio acreage and has spread to neighboring states, especially Pennsylvania and Kentucky. Because of its *yielding ability*, *stiffness of straw*, and *winter hardiness* it has a place in Maryland. Although it appears to do well over most of the state, it is especially recommended as a substitute for Leapland where winter injury is likely to be of importance, as for example, late seedings, and seedings at the higher altitudes of Western Maryland. It is well suited for combine harvesting, and is quite satisfactory for milling.

Thorne is almost awnless, has brown or bronze colored chaff, erect head, and exceptionally stiff straw. However, it is subject to scab damage and at times gives low weight per bushel. The following table compares Thorne with other varieties.

Performance Ratings for Several Wheat Varieties Grown in Maryland

Variety	Yield in Bu. per A.			Strength of Straw	Resist. to Loose Smut	Test Wt. per bu.
	College Park 3 yrs.	Ridgely 2 yrs.	Winter Survival			
AWNLESS VARIETIES						
Thorne (R).....	30.3	43.9	good	very good	good	fair
Leapland (R).....	29.9	37.3	fair	good	good	fair
Leap.....	28.6	----	fair	good	good	fair
Forward.....	28.0	----	good	good	good	good
AWNED VARIETIES						
Mammoth Red (R)...	25.5	38.6	good	poor	fair	good
Nittany (R).....	27.7	33.7	good	fair	poor	fair
Fulcaster.....	27.6	----	good	poor	fair	good

(R) Recommended by Department of Agronomy, University of Maryland.

Wong Barley

This variety originated from a cross made in China. It was released in this country a few years ago by the Cornell Agricultural Experiment Station. Although Wong is a comparatively new variety, it has been in tests in many states, including Maryland, during the last three years. Because of its exceptionally stiff straw and good yields in territory where it is adapted, it is being accepted with a minimum of testing.

Wong is a six-rowed winter type and is almost awnless. Two rows of kernels on each head have short awns. The heads are very compact and are held erect until the plants become "dead" ripe. The straw is thick and *very strong* from end to end. It has about the same height as Marnobarb, but is a few days later in maturity. It is well suited for combining. It is resistant to mildew and so far has not suffered much damage from loose smut. Yields have been excellent where winter killing has not been too serious. In winter hardiness it appears slightly superior to Marnobarb but not equal to Tennessee Winter or Kentucky No. 1. Therefore, it is recommended for territory where Marnobarb has proved successful, namely, central and eastern Maryland.

Kentucky No. 1 Barley

This variety probably originated as a selection from the old Tennessee Winter. It has been in use much longer than has Wong, and has become well established from Kentucky northward to New York. It is a rough-awned type that has proved about as winter hardy as Tennessee Winter and at the same time has been more productive and has taller and stiffer straw. On the other hand, it appears more susceptible to loose smut than does the local strain of Tennessee Winter. With everything considered, it is recommended that Kentucky No. 1 supplement or replace the latter variety where winter injury is likely to limit the use of the less hardy varieties, Marnobarb and Wong, as for example, late seedings and seedings at intermediate altitudes in Western Maryland where winter barley begins to become an uncertain crop.

Performance Ratings for Several Varieties of Winter Barley Grown in Maryland

Variety	Bu. Per Acre 1944			Strength	Resistance to:	
	College	County	Winter	of	Loose	
	Park	Trials	Survival	Straw	Mildew	Smut
ROUGH-AWNED						
Tenn. Winter (R)	25.8	33.9	good	poor	fair	good
Ky. No. 1 (R)	27.5	---	good	fair	fair	poor
SMOOTH-AWNED						
Marnobarb (R)	35.9	36.9	fair	good	fair	poor
HOODED						
Iredell	23.0	---	good	fair	poor	good
AWNLESS OR PARTLY AWNED						
Wong (R)	38.1	38.9	fair	very good	good	good
Sunrise	32.4	---	fair	very good	good	poor
(R) Recommended by Department of Agronomy, University of Maryland.						

Question by Mr. Rutledge: How does Wong barley compare in height and stiffness of straw?

Answered by Dr. Rothgeb: One of the outstanding characteristics of Wong is stiffness of straw. It grows as tall as Marnobarb. Sunrise is a little shorter variety.

Question by Miss Carrere: Pennsylvania State College recommends that Wong be planted two weeks ahead of the other barley. Is this true in Maryland.

Answered by Dr. Rothgeb: In the case of many tender crops you can compensate somewhat for this tendency to winter injury by early planting, which gets plants well started before winter sets in. You can plant too early, however. In Maryland, we recommended planting barley a week or ten days before proper time for wheat.

Question: What do you recommend as the rate of seeding?

Answered by Dr. Rothgeb: As far as we know, Wong barley should be planted at the rate of two bushels per acre. This is the rate of planting used in our tests. If you are seeding it at the right time on good ground the amount might be reduced.

Comment by Mr. Arbaugh: In a variety demonstration conducted on my farm, Wong did not show any loose smut, whereas Marnobarb and Tennessee Winter did.

Question: How does the weight of straw compare with other barley?

Answered by Dr. Rothgeb: It probably runs a little heavier.

Comments by Ray Norman: I am very enthusiastic about Wong barley because it stands up better after it is ripe and there is less shattering of grain. This makes it a good variety for harvesting with a combine. Our yields were a little over 65 bushels per acre last year for Wong and about 40 bushels for Marnobarb. The Wong barley threshed easily and seed was sold directly from the combine. There was no trouble with beards, as is experienced with some other varieties.

ONE YEAR'S EXPERIENCE WITH BARN HAY DRIERS

Discussion led by RAY W. CARPENTER, Head of the Agricultural
Engineering Department

A great deal of interest was shown in barn hay driers last year. People are beginning to realize the importance of saving all of the hay possible and are therefore interested in new methods of curing hay. Last year we heard from a representative in Virginia concerning their experience. We also heard from one operator in Maryland, Mr. Frank Parrish of Taneytown. During the past year eight additional systems were installed in this state.

This discussion will be primarily brief reports given by people who have used these hay driers during the past year. I will make a few

preliminary comments and describe briefly each installation before calling on the speaker.

Heat is not used in any of the installations in Maryland that were designed last year. The first report will be given by Mr. Lloyd Balderston, Colora, Maryland. His barn is a two-story type, 36 feet wide and 76 feet long. A Buffalo blower with a capacity of 30,000 cubic feet of air per minute was installed.

Mr. Balderston (talk abstracted): The first hay cured was alfalfa with some timothy. Red clover and alsike was also stored at this time. These cuttings filled about 8 feet. We encountered a lot of wet weather. As far as possible, we stored the hay the same day it was mowed. Sometimes it was held over until the next morning. Some of the hay had to be put in during rain.

We cured this hay in about three weeks. Second cutting alfalfa and Ladino clover was placed on top of it. This was followed later by a cutting of soybean hay. Bad weather was encountered while harvesting the soybeans.

The total depth of hay stored was about 16 feet. Since it packs tighter, just as much hay was stored as formerly.

The second cutting of alfalfa and the Ladino clover and soybeans all cured with a good green color and was high in quality. The first hay cut, some of which was stored actually while it was raining, did not have quite the green color of the hay stored later. It was much better hay than we have been accustomed to using. There was no browning of hay or mow burning like we used to get.

At first, our help objected to putting in such green hay. However, they stayed on the job and when we finished they came out smiling. Lack of dust in the greener hay and the constant changing of air made the mow a decent place to work in, even under a slate roof. These two features overcome the job of handling the greener heavier hay.

We started feeding the hay in August and have been feeding it continuously. It's the nicest hay we have ever had. Strangely, the hay is easier to get out of the barn than usual. This is a result of the necessity for separating each bunch as it is put in, so the air blown through the hay in curing will be evenly distributed.

Mr. Carpenter: The next report is to be made by Mr. Bruce Campbell, Nottingham Farm, Inc., Raspeburg, Maryland. His barn is 38 feet wide and 92 feet long. The roof is of gambrel construction. It starts at the barn floor. The barn is a one and one-half story type. It has a center duct, also. The branch ducts are improved. We built tapered ducts that start at 12 inches high and taper down to 2 inches with a uniform width of 10 inches. The air escapes from the ducts through holes drilled in the duct walls near the floor line. The ducts have a solid

bottom. They give better and more uniform distribution of air than we would get otherwise. The capacity of the blower is about 40,000 cubic feet of air per minute. It is the largest in the state, so far.

Mr. Bruce Campbell (Talk abstracted): The only hay crop we tried to cure in the drier was soybean and sorghum. It was planted late. We encountered very bad weather at the time of curing. This is a sample of the hay. It appears as good as most hay of this type when cured in favorable weather. It is questionable whether the hay could have been saved without the drier. Our dairy cattle eat the hay well.

The only spoilage we had was in areas where it was walked over more than in others in spreading it in the mow. Uneven spreading permits the air to go around compacted bunches and up through the loosely packed hay. Even, loose packing is essential for proper curing in the barn.

Question: Is it practicable to use heat in connection with the drier?

Answered by Mr. Carpenter: At Knoxville, Tennessee, a couple of weeks ago I attended a conference on hay drying. Heat is being used with a few units in other states, but the engineers and farmers generally were not favorably impressed with them. I was surprised. I think a small amount of heat will be helpful. By raising the temperature of the air 25 degrees, relative humidity would be cut in half, which should increase the rate of drying. Engineers at T. V. A. and Virginia Polytechnic Institute think that most of the hay can be saved by use of barn driers without heat; therefore, they question whether the extra saving from use of heat is worth the cost.

Mr. Carpenter: The next person has a barn 36 by 57 feet. It holds about 45 tons of hay. Since the operator was not interested in having a blower to handle the entire barn at one time the unit is arranged so that each half of the mow can be blown independently of the other. This permits the use of a smaller motor and less expensive fan. Mr. C. Spencer Dashiell, Queenstown, Maryland, will report.

Mr. Dashiell (talk extracted): Our system is just a little different from some of the others. We call it the split system. We arranged to dry one-half of the barn at one time. In building the dryer, Mr. Carpenter drew the dimensions and left them with me for the carpenter to put in. We have a very small farm and we run probably a little larger herd on this size of farm than we would ordinarily. The main crop which we raise is hay—we buy all of our grains. With Mr. Carpenter's help we put in this system and I am more than pleased with it. Up to the present year we have had to buy at least $\frac{1}{2}$ of the hay we used. In putting in this system I can say that this year we saved at least $\frac{1}{2}$ of our hay that we would have lost. Last year I bought 26 acres of alfalfa and by the time alfalfa was cut and ready to be taken in there was nothing but stems. This year we had practically the same

experience. I cut my hay when the weather was very damp and unsettled. It happened that at the time the hay should come in Mr. Carpenter was on the farm. He advised me to take in wet hay, since the drier was to be used. My help just about left because the hay was so heavy. I had several Jamaicans, so I thought it would be a good time to do it.

We separated the hay as it was put in the barn. The hay was tough and wet when stored. The workmen were about ready to quit. Finally, I had to give them more money to keep them. I started to work with the drier after the hay was in the barn and I didn't know whether it was going to be all right or not. I would blow it to where I thought it was right and in about 20 minutes I could get it down to where I thought it was safe. I put one humidity recorder in the mow and one beside the blower. They would register the same. I would turn blower on and noticed that in the mow it would raise from 20-40 percent higher even in this wet condition than it would be where my blower was located. I figured that I was still taking moisture out of my hay as long as it registered 20 percent higher in the mow than at the blower.

A white dust appeared that discouraged me, so that I thought that maybe I was on the wrong track. The cows were on lespedeza pasture and I took a handful of this hay and gave it to the cows and they ate it greedily. Eventually, around the first of November, we started feeding this hay. By this time the white dust had disappeared. The hay has nice green color and has something that the cows like. Always before I had to throw out stems. They ate the leaves and stems. I wouldn't advise anybody on my way, though I wouldn't be without it. One advantage is that hay put in green and wet does lose its leaves in the barn, not in the field. We take those leaves and shovel them up and feed them to the cows; leaves as green as when it was cut. I would have lost two-thirds of the first cutting, I am sure. This is my experience with the drier. I am 100% for it and I do feel that I have saved lots of money.

Question by Mr. Mullinix: How much did it cost to install the unit?

Answered by Mr. Dashiell: Between \$700 and \$800.

Comments by Mr. Carpenter: Weather stayed wet and foggy for several days after Mr. Dashiell put the hay in the barn. We felt bad because of the white dust. People from other states say that it is not an uncommon happening and it does not have any harmful effects, either on hay or on cattle.

There are two schools of thought regarding the operation of the blower during nights and rainy days. One policy is to limit the operation of the blower during such periods to one or two hours out of each six, just enough to keep the hay from heating. During periods of sun-

shine the blower is operated continuously. This method requires a time clock switch.

The other policy is to run the blower continuously, regardless of the weather, for the first seven to ten days, followed by daytime operation until the drying is complete. This second method appears to be growing in favor. It is strongly recommended for drying chopped hay in the few reports which are available regarding this practice.

There hasn't been a single record of fire by use of hay driers, with hay going in the mow at 35% to 60% moisture. Nor, has there been a case of spontaneous combustion.

Mr. Carpenter: At the University Agronomy Farm we have a barn 34 x 50 feet in which a drier is installed. This is a small unit. Mr. Stanley P. Stabler, Farm Superintendent of the Plant Research Farm, will tell you the results of hay drying there.

Mr. Stabler (Talk abstracted): Mixed hay was cut in the morning of one day and stored the afternoon of the same day. Moisture was 35% when stored. This hay cured splendidly, retaining green color, leaves and had a good aroma. Soybean hay cut during a rainy period in September had a moisture content of 55% when placed in the barn. Humidity was high for more than a week. We thought the hay had rotted until we baled it. To our surprise the hay was of fairly good quality. Based on experiences of a neighboring farm at the same time we would have lost all of the hay without the hay drier.

Comments by Mr. Carpenter: When this work started I was quite enthusiastic about the possibilities of barn hay driers. During the summer I was not so sure. Seeing the results, I feel better about them. Remember this, the publicity about barn hay driers has been a little over done. Barn hay driers will save leaves and feeding qualities, but the quality of the hay will not always be as high as some would have you believe.

Comments by Dr. Lane Moore, Dairy Department: This barn drying procedure looks to me like it is going to be a coming thing. I think it is essential that we keep our feet on the ground. As far as feeding value is concerned, none of my experiments have been completed. The University of Virginia states that some heifers were compared—some fed field cured and others barn cured hay. About equal gains. There have not been any experiments run on feeding value compared with the same hay cured in the field. We are going to get extra feeding value from the hay since we are not leaving any of it in the field. There seems to be considerable extra quality to hay produced by this procedure. Good quality hay is necessary to health and production. The great saving in terms of milk is in getting the crop off the fields and into the mow.

REPORT OF BUSINESS MEETING

The business meeting was called to order by the president, Willis L. Cissel. The nominating committee recommended: J. Charles Rutledge for President; William Brendel, Jr., Vice-president; John W. Magruder, Secretary-Treasurer, and Cecil K. Holter, Farm Bureau representative. A motion was made and passed to accept the nominations. The Auditing Committee, composed of Vernon Bandel and R. G. Rothgeb, reported that they had audited the books and found them correct. A motion was made and passed to accept the report of the Auditing Committee. The meeting adjourned.

REPORT OF THE 36th Annual Meeting of the Maryland State Beekeepers' Association

The 36th Annual Meeting of the Maryland State Beekeepers' Association was held on January 13, 1945 in the Hamilton Hotel, Hagerstown and was attended by sixty-five beekeepers from nine counties. Several Pennsylvania and West Virginia beemen were also in attendance.

Beekeepers setting up displays in the 8th Annual Maryland Honey Sweepstakes arrived the evening before the meeting so as to have all displays and exhibits in place by meeting time.

The meeting was called to order by President Harold L. Kelly, Silver Spring, who described the honey market situation in Washington, D. C. and reviewed the work being done by the Maryland branch of the industry to supply the pollination needs of the country and to help make up for the lack of sugar. Mr. Kelly also voiced the hope that suitable research facilities would be set up at College Park for the study of bee culture problems pertinent to Maryland. He then called on Mark Miller, County Agent, who welcomed the visiting beekeepers to the county and expressed a desire to know more about bees. He pledged his full cooperation in fostering the industry in Washington County.

George J. Abrams, Apiculturist, University of Maryland, told of the results of this year's experimental work to determine the feasibility of practicing migratory bee culture in Maryland. He pointed out that in the years 1942, 1943 and 1944, Maryland had suffered severe crop shortages because of weather conditions, mainly drought, which had resulted in colony averages of surplus honey of not over 38 lbs. in stationary apiaries and in some cases of total crop failure, whereas colonies moved to the mountains for basswood and sumac honey flow were able to net upward of 70 lbs. surplus. Mr. Abrams described methods of moving and pointed out other potential possibilities in the State. He made particular reference to lima beans on the Eastern Shore.

L. B. Shearman, Glen Arm, Maryland's largest bottler, described the difficulties being encountered by bottlers in securing shipments of glassware and spoke of the honey wholesale market conditions.

Dr. L. P. Ditman, University of Maryland, showed colored slides of a number of Maryland honey plants of both surplus and auxiliary value. He then described some of his methods of management and called particular attention to the necessity for using two bodies for the brood nest. He assured the gathering that bee culture is a paying business if properly handled and cited figures to show operating costs and profits.

After this talk the meeting was devoted to a question and answer period and much discussion ensued, particular interest being shown in large charts hung on the wall showing length of developmental stages of the various casts and the division of labor phases.

The winners of the sweepstakes competition were then announced.

The meeting adjourned at 5 P. M. and the beemen then spent some time inspecting the lobby exhibits.

GEORGE J. ABRAMS,
Secretary-Treasurer.

**REPORT
OF THE
Maryland Vegetable Growers'
Association**

TWENTY-SIXTH ANNUAL MEETING

Wednesday, January 10, 1945

Baltimore, Maryland

The twenty-sixth annual session was called to order by President J. E. Andrews.

The first order of business was a report from each Commodity Group on the results of a meeting with OPA officials in New York and experiences in 1944 regarding production and prices as reflected in price ceilings. Very interesting and comprehensive reports were made by the following members representing the commodity groups indicated:

J. E. Andrews, Hurlock—Cantaloupes.
S. H. Rayner, Salisbury—Sweet Potatoes.
H. H. Anderson, Princess Anne—Tomatoes.
A. Lee Towson, Jr., Chestertown—Snap Beans.
Russell Adkins, Mardela Springs—Cucumbers.

Following these reports, Leo McCormick, State Director for OPA, gave a short talk on the OPA work in Maryland and presented figures to show how the regulations had prevented inflationary prices.

The final topic for discussion at the morning session was the influence of price ceilings on movement of fresh products into the hands of consumers in time of surpluses. This was discussed from the standpoint of the retailer by John H. Bloecher, President, Independent Retail Grocers' Association and by George McCready of Baltimore, from the standpoint of the wholesaler.

Several resolutions were passed at the morning session, as follows:

1. Resolved: That the State War Board should consult each crop group of growers for their suggestions before setting goals and prices on crops for processing.
2. Resolved: That the Maryland Vegetable Growers' Association go on record, and suggest that the Farm Bureau do likewise, as

demanding that OPA establish some central office in Maryland with authority to issue prompt interpretation on all orders and regulations affecting the fruit and vegetable industries, as this type of produce is highly perishable and delay causes waste and monetary loss.

3. Resolved: That the Maryland Vegetable Growers' Association go on record as supporting the general theory of the OPA on prevention of inflation and holding down general retail prices, but asks that general labor wages likewise be held down.

Charles Fuller reported for the auditing committee that the Treasurer's accounts had been examined and found satisfactory. The balance on hand as of December 31, 1944, was \$61.86.

The last order of business for the morning session was the election of officers for the coming year as follows:

J. E. Andrews, Hurlock—President.
A. Lee Towson, Jr., Chestertown—Vice-President.
W. R. Ballard, College Park—Secretary-Treasurer.

The afternoon meeting was a joint session with the Horticultural Council at which Marshall T. Heaps, Cardiff, Maryland, presided.

Dr. Firman E. Bear, Head of the Soils Department of the New Jersey Experiment Station, gave a most interesting talk on "Looking Ahead with Liquid Fertilizers." On account of the comprehensive discussion presented by Dr. Bear, his address is published in full.

LOOKING AHEAD WITH LIQUID FERTILIZERS

FIRMAN E. BEAR

Give a plant physiologist plenty of pure water, some pure quartz sand that has been freed of all organic matter, and the necessary chemicals and he'll produce bigger yields of crops under the sand-solution culture system than the best farmer can grow on an equal area out in the open field. If the plants tend toward too slow or too luxuriant growth, if the leaves are too pale or too dark green, if the fruits are too small or too large, he adds a little more of this or that and the difficulty is quickly overcome.

Along the Atlantic Seaboard we have an abundance of sand and plenty of rainfall. The question is: How far can we go in applying the plant physiologist's technique on a field scale? Can we use liquid fertilizer instead of the dry type, and can we dispense with soil organic matter, the number-one problem of the man who farms a sandy soil?

In some of our experimental work comparing fertilizer placements, four times as much Ladino clover was produced on Lakewood sand by dividing the fertilizer into ten lots and applying one of these portions

every two weeks as could be obtained by working all the fertilizer into the top 3½ inches of soil at the start of the test or by putting it all in bands 2½ inches deep and 7 inches apart. The fertilizer was a standard 5-10-10 mixture applied at the rate of 1,000 pounds per acre. Each time one of the ten small portions was applied enough water was sprinkled on the soil to dissolve the fertilizer and carry it down an inch or so into the soil, all the other plots being given the same amount of water at these periods.

Alongside the Lakewood sand, equal areas of Sassafras loam and Penn silt loam soils were fertilized in exactly the same way, but there was very little difference in the yields following the three placements. This was under conditions in which all of the plots were watered whenever a lack of rain indicated a need for it.

This and other work we have been doing on fertilizer placement indicates that several principles apply when fertilizers are used in liberal amounts.

1. On loam soils, having a high retentive capacity for fertilizer elements, all the fertilizer can be applied to good effect in advance of planting, if a little is placed along the row and the remainder is located more deeply in the soil.

- a. In wet seasons, or when irrigation is practiced, shallow placement, such as results from applying the fertilizer broadcast and discing it into the soil, is effective.

- b. In dry seasons and in the absence of irrigation, deep placement, such as can be effected with the fertilizer attachment of an ordinary grain drill gives better results.

2. On sandy soils, having a low retentive capacity for fertilizers, better results are likely to be obtained by repeated small applications, especially if they are applied in liquid form or if irrigation is employed to dissolve the fertilizer and carry it down into the soil.

The sandier the soil and the less organic matter it contains the more necessary it is that everything the plant needs be contained in the fertilizer. Thus, not only nitrogen, phosphorus, and potassium, but calcium, magnesium, sulfur, boron, manganese, zinc, copper, iron, and possibly molybdenum as well, may have to be supplied by the fertilizer. Sandy soils have very little storage capacity for the normal fertilizer elements and they usually contain only traces of the equally-essential minor elements. A few hundred pounds of lime may raise the pH value of a sand to 7, but it soon drops back to where it was before the lime was applied. Similarly, only a little of each of the several fertilizer elements is required in such soils to raise their levels high enough to meet the immediate needs of plants, but levels soon drop back to where they were, once the crop gets under way or there is a good rain.

The plant physiologist applies his fertilizer, a really "complete" one containing all the essential elements, in a continuous-drop procedure. When this system is applied commercially to the production of roses and carnations on a large scale, the beds are flooded with the fertilizer-carrying water three times daily, or once every 8 hours. About one-half hour is required for the excess liquid to drain from the beds, so the plants feed on the nutrients in the water films surrounding the cinders, stone, or other bed material during about 22 of the 24 hours of each day.

When we think in terms of field procedures on irrigated sandy soils, it would appear that the fertilizer should be fed into the irrigation stream each time water is applied. This calls for the use of concentrated complete fertilizers carrying everything the plant requires in highly soluble form. If this were done, it is conceivable that many million acres of waste sand might become valuable crop land. Water-supply and wind-erosion-control would be the primary problems. This would call for impounding large amounts of rainwater and for the development of windbreaks.

For sandy soils that are not under irrigation, the best procedure would appear to be the use of liquid fertilizers that, after the crop has gotten under way, are applied in the form of a stream that falls into the soil behind the cultivator shovels. Possibly the fertilizer could be applied as a spray in such a manner as to bring it in contact with the underside of the leaves where there are more stomatal openings through which it can be absorbed.

If dry fertilizers are used on sandy soils, fairly deep placement is advisable so that the roots are encouraged to extend themselves deeply into the soil where they are better protected against drouth. Our best results with dry fertilizers were obtained by mixing one-fourth of the fertilizer with the surface soil and placing the other three-fourths in bands 7 inches deep and 14 inches apart, a placement that can readily be effected by dropping the fertilizer on the furrow bottom at plowing time. Further improvement was effected by the supplemental use of limestone in the same location.

On soils of the loam type, best results with dry fertilizers are likely to be obtained by a somewhat shallower placement, as by the use of a grain-fertilizer drill. Thus, in a comparison of broadcast-before-planting, on-furrow-bottom-at-planting-time, broadcast-on-top-of-seedbed-and-disc-in, and band-with-disc-drill-in-seedbed methods of placement on corn we have consistently gotten our best results by the last-mentioned procedure. Some fertilizer was placed along the row at planting time, of course, but the total amount (1,000 pounds per acre) was much more than could be applied with the fertilizer attachment on the corn planter.

A great many problems in the use of fertilizers remain to be solved. As soils become older agriculturally, minor element deficiencies become more troublesome. As the intensity of the agriculture increases, these

deficiencies grow more and more serious. The tendency is to apply more fertilizer of the same type we have always been using when perhaps we need a fundamentally different type of fertilizer and a different method of using it. By the year-after-year use of large amounts of fertilizer the heavier types of soil tend to become saturated with phosphate and potash and need balancing up with nitrogen and minor elements. The lighter soils, however, have no such storage capacity. For them, applications of highly-soluble, minor-element-reinforced complete fertilizers in liquid form offer possibilities for bigger and better crops. The sandier the soil the greater the possibilities in the use of such fertilizers and procedures.

W. D. McAfee, Chief of Farm Construction Materials and Tools, Office of Materials and Facilities of the War Food Administration, summarized the 1945 prospects for farm equipment, lumber and construction materials, and spray materials. In comparing the probable availability of these items in 1945 with 1944, the speaker gave the following estimates:

1. Farm machinery, in general, about the same.
Tractors—100 percent.
Irrigation Pumps—75-80 percent.
Sprayers—75-85 percent.
2. Labor saving machinery—questionable.
3. Crawler tractors—slightly better.
4. Rotenone—about same.
5. Sulphur and copper—supplies sufficient.
6. Nicotine—about same.

W. H. Kirkwood, Jr., Chairman of the Governor's Commission on Wholesale Markets in Baltimore, made a detailed report, showing the excellent work done by this Commission in surveying and analyzing the wholesale market situation in Baltimore. The major recommendations of this Commission are summarized as follows:

1. That present markets, with the exception of railroad terminals, are inadequate and should be improved, but such improvements should be consistent with strictest economy.
2. That improvements in these markets are for the benefit, not only of the citizens of Baltimore, but also of all growers and shippers. Therefore, the improvements might properly be financed by the State of Maryland. If any state funds are used, we recommend that the City of Baltimore be reimbursed for any tax revenue loss.

3. We suggest that these improvements should be financed out of the surplus accumulated by the State of Maryland, and ear-marked as a postwar project.
4. That proper legislation be enacted by the General Assembly in 1945 to effectuate the recommendations suggested by this Commission.

Several resolutions were approved jointly by the Vegetable Growers' Association and Horticultural Council, as follows:

5. Resolved: That produce sold on weight basis be weighed on public or certified scales with a certified weighmaster, for the basis of sale to processors.

6. Whereas: The Maryland State Horticultural Society recognizes that an emergency exists in the fruit growing industry by virtue of reduced quality and production, due largely, at present, to the codling moth menace, but primarily to nutritional disturbances and diseases.

Be it Resolved: That this Society requests that a horticultural field laboratory, with proper facilities, be established in Western Maryland to handle the problems of the fruit growing industry. This would include the services of well-trained men, including one horticulturist, and one entomologist, with sufficient funds allotted for travel and supplies with which to solve field problems. Suitable laboratory space should be rented to include facilities for inspection, and spray residue analysis.

Be it Further Resolved: That we request a minimum of \$15,000 be appropriated for these services.

7. Whereas: Horticulturists are ready to cooperate to the fullest extent in the production of food necessary to the national war effort, and

Whereas: The critical shortage of farm labor which threatens to become more acute in 1945, is the greatest deterring factor,

Be it therefore Resolved: That all agencies that have contributed toward ameliorating the farm labor problem, including the Extension Service, War Food Administration, the Selective Service Boards, and the Service Commands of the United States Army, be commended for their splendid assistance in 1944, and be urged to redouble their efforts in 1945.

Be it also Resolved: That the State and County Selective Service Boards be requested to be especially judicious in the administration of Selective Service regulations, so that essential farm workers, for whom no replacements are available, may be retained as key men and as foremen for inexperienced farm laborers and harvest workers.

Be it also Resolved: That Senator Millard E. Tydings be commended for his foresight in sponsoring the Tydings Amendment and that he be

urged to safeguard its provisions in connection with recent manpower directives designed to increase inductions of farm laborers into the armed forces, and also in connection with proposed legislation for a draft of men in 4-F classification.

Be it Resolved: That necessary orchard practices such as pruning, spraying and thinning of fruits be given a high priority in the use of prisoners of war.

Be it also Resolved: That the War Department be urged to establish more prisoners of war camps in areas of critical farm labor shortage, and to finance the construction of such camps.

Be it also Resolved: That the Extension Service and the War Food Administration be urged to import into the State of Maryland, the maximum number of foreign workers needed for proper harvesting of farm crops.

8. The growers of fresh fruits and vegetables in the State of Maryland recognize the very poor marketing conditions in the City of Baltimore for the wholesale distribution of truck shipments; therefore, these three organizations strongly support the recommendations of the Governor's Commission for improving the Baltimore Wholesale Fruit and Vegetable Markets, and these organizations strongly urge that proper legislation be enacted by the General Assembly in 1945 to effectuate the recommendations of the Commission.

The following officers of the Horticultural Council were elected:

Marshall T. Heaps—Chairman.
Joseph Merritt—Vice-Chairman.
C. H. Mahoney—Secretary.

FIFTEENTH ANNUAL MARYLAND VEGETABLE SHOW Premium Winners

GROUP I. Adult Certified

<i>Class I. Irish Cobbler.</i>	<i>Amount</i>
1. Willard T. Pilchard, Pocomoke	\$4.00
2. William P. DeBerry, Oakland	3.00
3. Robert V. DeBerry, Oakland	2.00
4. William F. DeBerry, Oakland	1.50
<i>Class II. Any Other Early or Medium Early Variety.</i>	
1. William F. DeBerry, Oakland	4.00
2. Robert V. DeBerry, Oakland	3.00
3. William P. DeBerry, Oakland	2.00
<i>Class III. Sequoia.</i>	
1. William F. DeBerry, Oakland	4.00
2. Robert V. DeBerry, Oakland	3.00
3. William P. DeBerry, Oakland	2.00
4. Willard T. Pilchard, Pocomoke	1.50
5. Evans Chaney, Laurel	1.00

Class IV. Any Other Late Variety.

1. George Buckingham, Marriotsville	4.00
2. William P. DeBerry, Oakland	3.00
3. Robert V. DeBerry, Oakland	2.00
4. Willard T. Pilchard, Pocomoke	1.50
5. Evans Chaney, Laurel	1.00
6. William F. DeBerry, Oakland	1.00

Class V. Sweet Potatoes.

1. Robert T. Williams, Salisbury	4.00
2. Billy Toadvine, Salisbury	3.00
3. Edgar L. Williams, Salisbury	2.00
4. Carl H. Smith, Salisbury	1.50

GROUP II. Adult Commercial

Class VI.—Irish Cobbler.

1. Jacob Burtner, Boonsboro	\$4.00
2. Howard Burtner, Keedysville	3.00
3. William F. DeBerry, Oakland	2.00
4. William P. DeBerry, Oakland	1.50
5. Billy Toadvine, Salisbury	1.00

Class VII. Any Other Early Variety.

1. Benjamin DeBerry, Oakland	4.00
2. Mrs. Wm. F. DeBerry, Oakland	3.00
3. Mrs. Wm. P. DeBerry, Oakland	2.00
4. William F. DeBerry, Oakland	1.50
5. Howard Burtner, Keedysville	1.00
6. Anna DeBerry, Oakland	1.00

Class VIII.—Any Medium Early or Medium Late Variety.

1. Symore Smith, Long Green	4.00
2. William F. DeBerry, Oakland	3.00
3. Anna DeBerry, Oakland	2.00
4. Benjamin DeBerry, Oakland	1.50
5. William F. DeBerry, Oakland	1.00
6. William P. DeBerry, Oakland	1.00

Class IX. Rural (Smooth or Russet).

1. Karl Lohr, Oakland	4.00
2. Anna DeBerry, Oakland	3.00
3. Mrs. William F. DeBerry, Oakland	2.00
4. Mrs. William P. DeBerry, Oakland	1.50
5. William P. DeBerry, Oakland	1.00
6. Howard Burtner, Keedysville	1.00

Class X. Sequoia.

1. William P. DeBerry, Oakland	4.00
2. Benjamin DeBerry, Oakland	3.00
3. Robert V. DeBerry, Oakland	2.00
4. Anna DeBerry, Oakland	1.50
5. William F. DeBerry, Oakland	1.00
6. Willard T. Pilchard, Pocomoke	1.00

Class XI. Potomac.

1. Benjamin DeBerry, Oakland	4.00
2. Mrs. Karl Lohr, Oakland	3.00
3. William F. DeBerry, Oakland	2.00
4. William P. DeBerry, Oakland	1.50
5. Walter DeBerry, Oakland	1.00
6. Karl Lohr, Oakland	1.00

Class XII. Any Other Late Variety.

1. George Buckingham, Marriotsville	4.00
2. Anna DeBerry, Oakland	3.00
3. Mrs. Wm. F. DeBerry, Oakland	2.00
4. Evans Chaney, Laurel	1.50
5. Mrs. Wm. P. DeBerry, Oakland	1.00
6. Miss Ruth Link, Ednor	1.00

Class XIII. Maryland Golden Sweet Potatoes.

1. Robert T. Williams, Salisbury	4.00
2. Edgar L. Williams, Salisbury	3.00
3. Richard T. Williams, Salisbury	2.00
4. Ernest Mathews, Salisbury	1.50
5. Carl H. Smith, Salisbury	1.00
6. Joseph H. Parker, Salisbury	1.00

Class XIV. Sweet Potatoes.

1. Joseph H. Parker, Salisbury	4.00
2. Guy S. Elzey, Salisbury	3.00
3. Ernest Mathews, Salisbury	2.00
4. Carl H. Smith, Salisbury	1.50
5. Vaughn Jones, Hebron	1.00
6. Howard Burtner, Keedysville	1.00

GROUP III. 4-H Club Certified and Commercial

Class XV. Early Varieties.

1. Walden Burtner, Boonsboro	\$4.00
2. Harold Remsburg, Keedysville	3.00
3. Edwin Burtner, Keedysville	2.00
4. Cecil Holter, Jefferson	1.50

Class XVI. Medium Early Varieties.

1. Walden Burtner, Boonesboro	4.00
2. Edwin Burtner, Keedysville	3.00

Class XVII. Late Varieties.

1. Edwin Burtner, Keedysville	4.00
2. Walden Burtner, Boonesboro	3.00
3. Merrill Gordy Culver, Hebron	2.00

Class XVIII. Sweet Potatoes.

1. Samuel Adkins, Salisbury	4.00
2. Edwin Burtner, Keedysville	3.00
3. Merrill Culver, Hebron	2.00

GROUP IV. FFA Certified and Commercial

Class XIX. Early Varieties.

1. Richard Holter, Jefferson	4.00
2. Robert Holter, Jefferson	3.00
3. Harold Remsburg, Keedysville	2.00

Class XX. Medium Late Varieties.

1. Harold Remsburg, Keedysville	4.00
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Class XXI. Late Varieties.

1. Harold Remsburg, Keedysville	4.00
2. William Oland, Brookeville	3.00
3. Mrs. Wm. Oland, Brookeville	2.00

REPORT
OF THE
Maryland Stockmen's Association

SIXTEENTH ANNUAL MEETING

January 10, 1945

Baltimore, Maryland

Joseph W. Shirley, Jr., President, opened the Sixteenth Annual Meeting of the Maryland Stockmen's Association at the Lord Baltimore Hotel, Baltimore, Maryland. He outlined briefly the conditions of the association and business transacted during the year and gave an account of the activities of the Maryland Stockmen during 1944. He then introduced the speakers of the morning.

4-H LIVESTOCK CLUB WORK IN MARYLAND

Mylo S. Downey, State Boys' Club Agent, reported on 4-H Club Livestock activities being carried on in the State. A number of 4-H Club members appeared on the program with him to tell about some of their own club experiences and the values they gained through their participation in the 4-H Club program.

Edward Stewart, Whiteford, Harford County, is a representative of the group beyond club age, but has a general interest in 4-H Club work. Eddie is a Local Leader in his home community.

Merritt Pumphrey, Ellicott City, Howard County, a successful baby beef club member for several years, gave some of the details and records of his baby beef projects.

Charles Lutz, Middletown, Frederick County, State champion livestock club member in 1944, an outstanding Hampshire breeder, gave a report on his recent trip to the National 4-H Club Congress in Chicago, and discussed some of the practices being followed in the care and management of his swine herd.

William Cunningham, Hagerstown, Washington County, reported on 4-H Club colt work in his county and related some of the things he has done which were responsible for his being selected as the State champion colt club member in 1944.

Presentation by Mr. Downey and the club members was a demonstration of how 4-H Club work helps young people prepare for their life responsibilities. It was brought out that good livestock projects are a means to the end—the development of good citizens for tomorrow.

MARYLAND IS A CORN-HOG STATE

BY VERE S. CULVER, Port Deposit, Md.

Your speaker believes he is capable of recognizing the conditions in this, our grand State of Maryland, which entitle it to be classified as a Corn-Hog State, as he was born in Nebraska on a farm that produced Poland Chinas and Short Horns. Later, he lived in Southern Minnesota, only 12 miles from the "Tall Corn State" of Iowa, where he bred Durocs and dairy cattle. In fact, from most every angle, the natural conditions in Maryland are equal or superior to those in the so-called Corn-Hog Belt. Our winters are less severe, our springs are earlier, and falls are later as well as more pleasant, than is true in much of the Corn Belt. Our summers are no more uncomfortable. Maryland rainfall is equal in amount to that of the most productive corn belt states and it is usually as well distributed throughout the corn growing season. The better farmers of Maryland, with hybrid seed, rotations, legumes, liming, and fertilization, can and do produce yields of corn and wheat equal to the best in the so-called corn belt. Much of our good Maryland land is lower in price per acre, than is asked for considerable of the corn belt land. Through proper management, Maryland can be unexcelled for her pastures of bluegrass, clover and alfalfa.

This is the combination that makes for a Corn-Hog State. Where we can grow such yields of corn and wheat, and where grasses thrive as they do in Maryland, under good management, we have an ideal and most economic setup for pork production. With nature smiling, as she does on the hog producers here in Maryland, we also have the markets at our very door. Baltimore packers process many more hogs than are raised in this territory. On the other hand, this area could and should furnish this market with the bulk of its hogs.

A Challenge to Stockmen

Here is a challenge to Maryland Livestock farmers, a challenge that could mean much in protecting our natural resources, our soil fertility, the prevention of erosion, and increase our earning power. Our success will depend upon the intelligence and efficiency which we develop in the management and handling of our swine.

There are sections in Maryland where one man with proper equipment can care for and grow 150-250 acres of corn by himself. Furthermore, he could feed this corn right on his own fields by letting his own hogs harvest the corn for him, thus eliminating cost of harvesting and spread-

ing manure upon the fields. In fact, rye grass and winter vetch could be seeded at the time of the last cultivation, which would provide grazing and legumes for the hogs while harvesting the corn and, in addition, make a fine winter cover crop. Outside of fencing, such a setup would require nothing but a moderate building cost and capital investment.

Hogs can be grown at a very low cost, here in Maryland, if clover and alfalfa pastures are used, proper sanitation methods are followed, and a right type of hog selected and cared for under such management.

Beef and dairy cattle profits may well be increased by supplementing with pork production. There is not only the opportunity to utilize feed that would otherwise be wasted, but it may help balance the consumption of home-grown feeds.

What Type Hogs?

The profitable hog must be one that is meaty and possesses feeding quality. A hog that is rather low on the ground, with plenty of body length, yet deep with wide, full loins, and deep, plump hams. A hog that is trim in head and jowl, with no wastiness or surplus lard. That hog of this right type which will weigh 200 pounds the quickest, is the one that will prove most profitable. This kind can be bred that will reach this weight at 5 to 6 months of age.

Profitable management requires not only the right type of meat hog, but sound, sensible management, none of which is more important than sanitation. Sanitation, the prevention of worms, lice, mange, cholera, Bangs, swine flu, etc. Farrowing a clean sow in a clean pen or yard, and keeping the pigs until they are at least four months old free from contamination and on clean ground is the first essential step. By clean ground is meant, ground on which no hogs have previously been for at least three years.

Elaborate, expensive housing is not needed to raise pigs. But a dry shelter with sufficient room to prevent crowding is vital. Electric pig brooders, which can be homemade, will save almost 100 percent of the pig crop. They are inexpensive to operate and will do the trick. Dry bedding should always be provided. A frequent spraying with oil will prevent lice and mange. Pigs should be double treated for cholera 10-12 days before weaning time. And, of course, the breeding sows and boars should be kept Bangs-free through blood testing at least twice yearly just prior to the breeding season.

The pig sty, so common in many sections of Maryland should definitely be abandoned. In its place use a portable house that can be scrubbed clean with boiling lye water between farrowings and frequently moved onto clean ground and fresh pasture. Packers penalize pigs raised in stys, where they become cripples and cannot walk to the killing floors. On the other hand, they gladly will pay a premium for a good, active, clean, meaty, healthy hog that is sound and has been properly fed on pastures.

Prolificacy is paramount in profitable pork production. Two litters of at least 8 good, rugged pigs raised twice each year is vital and not impossible to attain. That is where Maryland's bluegrass sod in March, her clovers and alfalfa in April and May, and again in August, September and October, play a big part in providing proper environment for thrifty, profit-making hog production.

Production testing; the measuring of the ability of a sow to milk heavy and sustain that heavy milk production for at least 8 weeks after farrowing and produce large litters of rapid growing pigs, is a definite demand of today's successful producer of pork. There is as wide a variation in the milking capacity of sows as there is in cows. Moreover, milk from certain sows and sow families evidently aid the pig to do better and grow more rapidly than does milk from other sows. Also, some sires and dams can and do transmit to their offspring the ability to grow big quickly while others do this in far less degree. The latter kind, along with careless methods, add much to the expense of hog raising.

All of the essentials outlined herein are practiced by the most successful and efficient swine breeders of this State. Some of the less successful partially follow some of these plans.

With a 30% drop in hog production as estimated for 1945, as compared to that of 1944, and with 1,000,000 less hogs slaughtered during the past four weeks in the 32 plants operated under Government inspection in this country, it is time all patriotic livestock breeders of Maryland halt this continued scarcity of our vital meat product, pork. Let's about face and make Maryland what she is and can be, a true Corn and Hog State.

BEEF CATTLE FOR MARYLAND

BY W. ALAN MCGREGOR, Worton, Md.

The foundation of a successful beef cattle operation, whether it be on a purebred or commercial basis, is home-grown grass and roughage. That is fundamental and no beef cattle operation can be economically sound without plenty of good, home-grown roughage and grass. Maryland is fortunate in this respect, where we have, or can make, good pastures. We can, and are, growing excellent hay crops, silage and other rough feeds. Maryland also has the great advantage of being close to the large centers of population with their incessant demand for more and better beef. We have the land on which to grow our feed. We have the market right at our door. All we lack is more good beef cattle to consume our feed and supply our demand.

The scrub or inferior beef animal has no place in this Maryland picture. We cannot compete with the West on a quantity basis, but we can compete and are doing so, on the basis of quality. Quality in beef cattle is nothing more nor less than the type of beef animal which is

thick, deep, smooth, and with the capacity to consume large quantities of good feed and quickly turn it into a choice carcass of beef. It has been demonstrated time and again that a choice feeder calf will make better use of his feed and, therefore, return a better profit than any of the lower grades. It costs no more, if as much, to keep the bulls and the cows capable of producing good and choice calves than it does the ones which can only produce the inferior kind. True, your initial investment will be greater but your net returns will quickly offset this.

The last issue of the *Eastern Breeder* gave a report, by Paul Swaffer, which clearly brings out the advantage of quality. Some 5,600 feeder calves of all breeds were sold, at auction, during 1944 in 16 sales held in different sections of Virginia. I won't quote a lot of figures, just enough to emphasize my point.

537 choice calves of all breeds averaged 453 lbs. and brought \$60.32 each.

1,354 good calves of all breeds averaged 420 lbs. and brought \$52.84 each.

1,199 medium calves of all breeds averaged 408 lbs. and brought \$47.17.

202 common calves of all breeds averaged 418 lbs. and brought \$40.24.

Here we have a difference of \$13.15 per head in price between the medium and choice calves and a difference of \$20 per head between the common and choice calves.

Put this on the basis of a herd producing 50 feeder calves a year and here is what we find:

50 choice calves at \$60.32 give a net return of \$3,016.00.

50 medium calves at \$47.17 give a net return of \$2,358.50.

50 common calves at \$40.24 give a net return of \$2,012.00.

The man producing medium calves took \$657.50 less than if they had been choice. The man producing common calves took \$1,004.00 less than if they had been choice.

I doubt very much if the man producing the 50 choice calves would use any more feed or any more labor than the man producing the 50 common calves. Most of it is in the quality of his bulls and his cows.

The Pure Bred Herds: We have many fine herds of purebred beef cattle of all breeds in Maryland. These herds are producing and distributing superior seed stock for the upbuilding of the quality of both purebred and commercial herds. The purebred business cannot prosper without a good substantial commercial cattle business behind it. We as purebred breeders can do much towards the building up of more and better commercial herds in our own state and throughout the nation. First, we must look to the quality of our own purebred herds. Never in history have we had a better opportunity to cull our herds and weed

out the ones that are not doing a good production job. Quality should be our aim and we can only produce quality by the use of quality bulls and quality females. We must produce and sell to the commercial breeder the kind of bulls that will improve the quality of his herd. Too many inferior bulls are being kept today just because they have pedigrees. There is no place for a pedigree scrub any more than there is a place for the grade scrub. Here in Maryland we have a real opportunity to produce the superior seed stock to build up and improve the beef cattle industry of the Atlantic Seaboard States. The opportunity is ours. All we need is the initiative to go and get the business. If we produce the right kind we will have no difficulty in finding the market.

The Commercial Herds: While it is perfectly true that we sell beef by the pound, and probably always will, at the same time never forget that it is the quality pounds that bring the high price. First, the commercial man should look for big, roomy cows capable of stowing away large quantities of roughage, because roughage is her main, and probably her only feed. She must have the capacity to consume large quantities of grass and roughage, produce a big, husky calf and give plenty of milk to properly raise that calf. A big, roomy cow need not be a big, long-legged, horsey cow. She should be of a good size, thick and deep of body, reasonably short of leg, smooth and feminine. I care not what breed you select, the same general description will apply. Try to get the cow herd as uniform in type as possible. Don't be fooled by minor faults of conformation. There is no such thing as a perfect animal. Know the faults in your cow herd and try to correct them with bulls that are strong where your cows are weak. Thickness and depth of body are essential in a beef animal. Get those things first and smooth out the details as you go along.

The herd bull can make or break you. A common bull will sire you common calves. A good bull will almost surely sire good calves. The bull must, above all things, be thick and deep with a thick covering of natural flesh. He must be a rugged, masculine fellow with plenty of bone and constitution. The Virginia calf sales show a difference in price of \$20.00 per head between choice calves and common calves. You can well afford the difference in price you would have to pay for a good bull over the price of a common bull.

With a good cow herd headed by a good bull, you will produce calves, if properly handled, that will weigh from 450-500 lbs. at weaning time. There is a market for these calves at any time from then on. You can sell them as feeders, right off their mothers, to 4-H Club and F.F.A. boys and girls, or other feeders. You can put them on feed or grow them out to be fed as yearlings or two-year-olds. This year we marketed from our own herd approximately 50 steer calves all of which were sold at weaning time or shortly after. Thirty-five of these calves went to commercial feeders at 16 cents per pound weighed right out of the feed lot. The balance went to 4-H Club boys and girls at a special reduced

price. We could have sold three to four times as many at the same price if we had had them. These steer calves brought an average of almost \$75 per head. A high price, yes, but the quality was there and people were, as usual, willing to pay a premium for quality.

The Breeding Herd vs. Purchased Feeders: Thousands of acres of grass and other thousands of acres that should be in grass are going to waste every year. Thousands of tons of roughage in the form of corn fodder, rough hay, etc. are going to waste that should be used, at least in part, for the maintenance of a beef cattle herd. Grass and roughage will maintain a breeding herd of beef cows in good, thrifty condition without grain. Small quantities of grain are needed for the maximum development of the young stock, while larger amounts of grain are necessary for the fattening of steers.

The man with a breeding herd makes an investment from which he gets a dividend each year in calves. The man who buys steers to feed gambles that the market will be such, when they are ready to go, that he can get back the cost of his steers, the cost of feed and labor and make a profit.

Much of our Maryland land is subject to erosion. We have learned a lot and still have a lot to learn about handling this kind of land. More grass and hay land, together with longer rotations, are inevitable and fast becoming a fact. This means more grass and roughage to market and the beef cow is the most efficient machine we have to convert this grass and roughage into dollars. The beef cow can be maintained on this grass and roughage alone. She requires no labor during the busy months of growing and harvesting crops. She needs no expensive buildings to keep her comfortable and thrifty. She raises you a big, husky calf and helps build up and maintain the fertility of your farm.

The Future: I don't pretend to know what the future has in store for us, any more than you do. I do know that we have learned a lot during the past few years. Learned how to cut expenses. Learned to do without a lot of things we thought we had to have. Learned to save labor and get along with less help. Learned newer and better ways of getting the job done. With what we have learned, with new and more efficient machinery which we will have available and perhaps with new and better varieties of feed crops, we should face the future with confidence.

We, as producers of meat animals, have sometimes been confused and bewildered by some of the regulations coming out of Washington. However, we have carried on with only one thought in mind and that is to get this war over with and build a better world to live in. We know that beef is and always will be the meat that is one of our basic and staple foods. We know that there will always be a demand for good beef. We know that, here in Maryland, we can produce good beef, on our home

grown feeds, and we know that our proximity to the large consuming centers of population put us in a most favorable position. The whole Eastern Seaboard is producing only a small part of the beef it consumes. If we go forward on the basis of more and more quality beef, we have nothing to fear.

NOON

The Maryland Hampshire Swine Breeders' were unable to hold their annual Ham and Bacon Breakfast during the luncheon hour. The Hotel management was unable to furnish the necessary food and help to carry out this plan.

AFTERNOON SESSION

A Movie—"Horse Power in Action"

Mr. Wayne Dinsmore, Secretary of the Horse and Mule Association of America, presented this movie to more fully demonstrate the practical use and management of the horse to make our source of farm power more efficient and economical. This film also demonstrates the value of the light horse as a source of pleasure and recreation.

PERTINENT EXTRACTS FROM ADDRESS

BY WAYNE DINSMORE, Secretary of The Horse and Mule Association of America, Inc.

Maryland horsemen have a fortunate location near markets and are well supplied with pastures most of the year.

New England, New York, Pennsylvania, and states south of Maryland use many horses and mules. In all probability they always will, for their farms generally are small, and many are hilly, stony, hence better adapted to horses and mules and animal drawn implements, than to mechanized equipment.

This suitability to horse-drawn implements is likewise true of Maryland. The average size of your farms was about 99 acres, 1940 census figures. Even your real farms, in valleys fairly free from stone, are for the most part under 180 acres. In fact, of the 42,110 farms in the state, only 6,554 were 180 acres or over. As livestock farms usually have at least one-third of their acreage in pasture, it is evident that 160 to 180 acre farms will have from 50 to 60 acres in pasture and probably 20 more in hay. This cuts crop acreage to about 90 to 120 acres. Generally, 30 or 40 acres of this will be in small grains, which are usually disced in; hence, land to be plowed will seldom exceed 60 to 80 acres.

Long experience proves that any farm can be well tilled with one able work animal for each 25 acres in crop land; hence, farms having from 90 to 120 acres in crop can be farmed effectively with 4 or 5 good work animals. If one or two are mares, bred for replacements, one spare work

animal should be allowed for each 4 or 5 at work. This permits easing up on pregnant mares by giving them lighter work a month prior to foaling, and a complete rest for 2 or 3 weeks after foaling.

The principal argument of tractor proponents is that the plowing and discing can be done in less time than with horses or mules; but with only 60 to 80 acres or less to plow, a 5-horse team on a 2-bottom plow which will turn 5 acres per day, can do all the plowing in from 12 to 16 days. A tractor might do the same work in from 4 to 6 days; but the question at once arises—Does it pay to buy a tractor and all the equipment that goes with it, to save the very few days that can be saved in plowing and discing? For farms under 200 acres, the answer must be no. The time saved is not worth the extra cost.

Breeding of work stock has fallen off in the 11 most western states—Montana, Wyoming, Colorado, New Mexico and states west thereof. They raise riding horses used on ranches and sold east when 8 or 10 years old, but not much else in horses or mules. The western half of North and South Dakota, Nebraska, Kansas, Oklahoma and Texas is mainly in large farms—640 acres or more and largely mechanized. Few horses or mules of any kind are raised. The eastern portions of the states just named and Missouri, Iowa, Minnesota, Wisconsin, Illinois, Indiana and Ohio, always have raised most of our work horses and mules. They have level land, free from stone, and have fairly large farms; hence, the use of mechanized equipment has become quite general and horse and mule breeding has declined greatly.

From your viewpoint this all adds up to one thing—Less work stock will be available in the middle west to ship into eastern states and this in time will give you better prices and more demand for work stock you have to sell.

The production and sale of horses and mules is but an incident to farming. Where good pastures and hays are available, as they are in your state, mares can be part of the work stock used, can do work and raise foals, which can be well raised on good pastures and hay with no grain till put to work at 3 years of age. Experimental work at the Michigan Experiment Station has proved conclusively that work horses raised out doors with nothing but good pasture and hay, ample in quantity, made just as big and as excellent work animals at 5 years, as those that are stabled and fed grain through winters. You must raise work animals this way if you expect to make any money on them. So raised, and worked as 3's, 4's and 5's they can be sold at a profit, as well broken work animals, by the time they are 6. It is evident, however, that no more horses should be kept than are needed to do the work and that some foals should be reared each year to furnish replacements enough to permit selling older animals before they are 8.

Under such a policy, Maryland farmers will get their work done effectively and economically, and have some profit on the income from a team of well-broken, mature animals sold every year or two.

BOARD OF DIRECTORS MARYLAND STOCKMEN'S ASSOCIATION,

1945

Jos. W. Shirley, Jr., Reisterstown	President
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Ural G. Bee	Secretary-Treasurer
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5. B. S. Oles, Kingsville	
For Director to Maryland Farm Bureau, Inc.	J. Herbert Snyder
For Delegate to Annual Meeting of the Maryland Farm Bureau,	John Muncaster
For Delegate to the Maryland Agricultural Society	J. Kieffer Funk

REPORT OF THE SECRETARY-TREASURER

The annual meeting of the Maryland Stockmen's Association was held January 12, 1944 at the Lord Baltimore Hotel, Baltimore, Maryland.

A very interesting program of speeches and educational discussions preceded the business meeting, which was held at 2:30 P. M. The dinner meeting was held at 6:30 P. M. at the Merchants' Club.

Senator Millard E. Tydings, U. S. Senator from Maryland, gave a very interesting talk on the agricultural situation at that time, also mentioning the various legislative programs which affect the livestock producers of the United States.

A copy of all speeches was included in the 1943 annual report of the Maryland Agricultural Society, re-prints of which were mailed to all members of the Maryland Stockmen's Association during that year.

Membership has increased from 332 in 1943 to 358 in 1944. Although this is a small increase, we still think of it as a good sign that the organization is prospering and the stockmen of Maryland are gaining more interest in the Association each year.

The Board of Directors met at 22 Light Street, Baltimore, Maryland, March 27, 1944 to discuss problems which were confronting the organization at that time. It was agreed by the Board of Directors at this meeting to change the publication of the Stockmen's News Letter from a monthly to a bi-monthly publication. As a result of this action, there have been six editions of the News Letter published in 1944.

The Board of Directors met again, December 12, at 206 East Redwood Street, to formulate a program for the coming meeting which was to be held January 10, 1944.

The Secretary has contributed timely monthly articles to the Maryland Livestock News which is published in the *Maryland Farmer* magazine under the sponsorship of the Maryland Stockmen's Association.

The Secretary wishes to express his thanks and appreciation to each and every member of the association who has contributed to the success of the News Letter or any other part of the Stockmen's Association program throughout the year. The Association is indeed indebted to the secretaries of the Animal Husbandry Department, University of Maryland for their efforts and cooperation in helping to make this organization a success.

The financial condition of the association is better than it was a year ago, with the balance on hand as of January 9, 1945 of \$306.94.

Respectfully submitted,

URAL G. BEE,
Secretary-Treasurer.

A MOVIE—"THREE TO BE SERVED"

This sound film showed the close relation and the need for fullest cooperation of the producer, consumer and the financier. Each must work in close accord with the other to fully serve everyone concerned. This picture carries plenty of humor and a good moral for any type of audience.

EVENING SESSION

Members of the Maryland Stockmen's Association held their annual banquet at the Merchants' Club, Baltimore, Maryland, the evening of January 10th. This meeting was well attended and greatly enjoyed.

Ural G. Bee, Secretary of the Association, presented Charles Lutz, of Middletown, Maryland, with the Wilson Award for outstanding club work in production of meat for the year of 1944.

1945 LIVESTOCK OUTLOOK

BY SENATOR GEORGE L. RADCLIFFE

The members present were greatly interested in the helpful remarks by Senator George L. Radcliffe. He gave a very interesting presentation of the livestock situation in Maryland and of the responsibilities of the stockmen of Maryland in producing livestock to help supply the great demand for meat during the coming year.

REPORT
OF THE
ANNUAL MEETING
OF
**Maryland Tobacco Growers'
Association**

January 10, 1945

Tangible clues to the cigarette shortage were given by George Sachse, General Manager of the Maryland Tobacco Growers' Association in his report to the annual meeting of that organization.

He answered the government statement denying a tobacco shortage because we have one and one-half years' supply on hand by stating that we ordinarily have three to four years' supply on hand for proper blending and mixing. The one and one-half years' supply is raw tobacco and not aged or mellowed.

Mr. Sachse recommended an increase of one cent per pack in the price of cigarettes. This increase would encourage the farmers to produce more by enabling him to pay the cost of production, would allow the manufacturer to hire workers for a six-day week by allowing enough margin of profit to permit them to pay overtime wages, and would allow the manufacturer to plan an increased program of production. The manufacturers have already asked for this increase in retail price.

Cigarette consumption has increased from 208,000,000,000 cigarettes in 1941, when the previous year's production was 1,090,000,000 pounds of tobacco, to 330,000,000,000 in 1944, when our 1943 production was 1,125,000,000 pounds. The increase in tobacco production was 35,600,000 pounds, which will make 12,000,000,000, but consumption has increased 122,000,000,000, and that consumption increase had to be made from the reserve supplies in the hands of manufacturers.

Striking at the OPA contention that the increase of one cent per pack would affect too many people, Mr. Sachse pointed out that the increase would amount to one dollar per year per capita in the United States. "How many people wouldn't rather pay the increase than walk around

trying to find stores with cigarettes, stand in line and then not get their favorite brand. All this is a waste of shoe leather, of time, and of manpower."

Though the Maryland Tobacco Growers' Association handled 4,800,000 pounds of tobacco in 1944, or an increase of 1,600,000 pounds over 1943, Mr. Sachse appealed to growers to better support the Association and thus give it more power.

Speaking for Governor O'Connor, F. Murray Benson, a director of the Association, stated that "Your particular field of effort has been with us since the beginning. It is the cradle of what is now Maryland. . . . Tobacco has been used as currency and is now classed as an absolute necessity . . . for on the battlefield men need water, food, and for morale, cigarettes."

Roy C. F. Weagly, President of the Maryland Farm Bureau, Inc., appealed to tobacco growers for cooperation of farmer interests for the mutual benefit of Maryland agriculture. He predicted that all Maryland men would be reexamined and reclassified in selective service. Their availability would be determined by the local draft board, he stated, who would consider how valuable the men were in their present occupations.

George I. Gardiner, salesman for the Maryland Tobacco Growers' Association, cited figures and stated that the Baltimore Cooperative Market has been consistently paying higher prices, as much as \$6.38 per hundred, over the Auction Market. "The Baltimore Cooperative Market is working as a non-profit organization in the interest of Maryland tobacco farmers," he said, "and it is for your best interests to sell your tobacco through your Association, so that we can do even more for you by handling a greater volume."

J. E. McCue, purchasing agent for the Association, told of the supplies for 1945, and predicted that farmers would receive a just share of whatever was available.

C. Carroll Lee, President of the Association, presided.

Maryland State Poultry Council

Summer Meeting

Baltimore, Maryland, July 13, 1944

President Harry H. Rieck presided.

Feed Supply Problem: Leon Todd, Managing Director of Northeastern Producers Council, pointed out that the general situation has now reached the point where the industry should adopt a definite policy concerning parity pricing, government control orders and similar items which seem to create problems by contributing to violent fluctuations of supplies and demand rather than minimizing them. This was especially appropriate at this time in view of the pending Steagall Amendment to the Agricultural Price Control Act, which the National Poultry Defense Committee was now studying and desired expression of the states' attitude concerning same.

President Rieck pointed out that the present Steagall Act provided for closer control of agricultural production and pricing, and requested a hand vote relative to omission of poultry products from the Act. This vote showed unanimous approval to exclude poultry products from the provisions of the Act, and was referred to the Resolutions Committee.

Cooperative Marketing Problems Under Government Control: Geo. C. Brown, Manager Westminster Co-op. Auction, pointed out that the auction was facing a complex problem of being short of eggs to meet its demand, while Baltimore markets were experiencing a glut of ungraded eggs.

Filling Government orders requiring inspection was a problem, since eggs are not regularly handled on Government grades and such orders must await arrival of inspector before being moved to purchaser. Auction is now serving producers in nine counties of Maryland and Pennsylvania, and in first half of 1944 has conducted business totaling \$238,000 and should reach \$500,000 by end of year.

Records show that patrons are receiving 2-3½c per dozen more for their eggs than they would secure through other channels were the auction not in operation. This is largely due to hucksters being off the market when eggs are plentiful and on market when eggs are scarce. This problem must be constantly met by the auction.

Ceiling prices of large chain stores in competition with small retailers also involves a price differential which creates a price problem for the auction.

Baltimore Poultry and Egg Quotations: In absence of W. E. Harrison, who was ill, Russell C. Hawes and others discussed this problem. Mr. Hawes pointed out that apparently only certain dealers, handling eggs on a current receipts basis only, contributed information which formed the basis for Baltimore Egg and Poultry Market quotations as issued by the State Department of Markets and published in newspapers. He cited comparisons of current market quotations for current receipts with prices for Grade A eggs handled by certain Baltimore dealers as showing a differential of 12 to 14 cents a dozen in favor of Grade A eggs, which information is not publicly reported. This unpublished pricing works to the disadvantage of producers and misleads the consuming public.

It was pointed out that lack of funds for adequately reporting the Baltimore market contributed to this problem. Securing information from proper sources to establish market price differentials for the various qualities of eggs actually sold in Baltimore seems to be the focal point of the problem.

This matter was referred to the Resolutions Committee by the President.

N. E. P. P. Co. Hatchery Division Work: H. F. Williamson, Secretary, reported that June output of chicks for 1944 was 16% under June 1943 on the Del-Mar-Va Peninsula. Hatcheries are now operating at about one-third of capacity, and a substantial reduction in production has been effected as requested by the War Food Administration.

The feed situation has been improved in recent weeks, though prices being received by producers at present are discouraging. Lowered demand for poultry meat through removal of most meats from point rationing is in part responsible though Army has reduced its purchases.

The industry now totals \$60,000,000 annually, which is probably the biggest industry on the Peninsula.

Increased consumption of poultry meat to take the increased production probable in postwar era should be studied carefully. Return of veterans and older people to peace-time pursuits will see increases in poultry meat production for which an expanded market must be found. Frozen or canned poultry to offer housewife a ready source of easily used poultry meat must be developed.

Work of Poultry and Egg National Board deserves support of the industry in working out these problems, he said.

Meeting recessed for luncheon at 12:30 P. M.

Business Session—1:30 P. M.: Roll call of Directors and Delegates was dispensed with, and Secretary read the minutes of the Winter Meeting of January 12, which were approved as read.

Treasurer's Report showed total receipts as of July 13, including balance on hand of \$755.71 on January 2, 1944, as \$2,263.44. Disbursements totaled \$1,175.96, leaving a bank balance of \$1,087.48, which, with five \$100 Series F Bonds, 12 years maturity value of \$500, made assets totaling \$1,587.48. This report was accepted upon motion by Mr. Snoddy, seconded by Mr. Coudon.

The matter of the Council's investing additional funds in War Bonds was discussed, and Mr. Coudon moved, Mr. Snoddy seconded that the Council invest all funds in excess of \$500 in Series F War Bonds. Motion carried.

COMMITTEE REPORTS

Yearbook: Dr. M. A. Jull reported the Poultry Department was already making plans for the 1945 yearbook. The secretary reported Mr. Ritter, who was absent, was considering moving to Pennsylvania late this summer and might not be able to serve as Business Manager of the 1945 Yearbook. George C. Brown reported that Mr. Ritter, who was married recently, had not yet completed plans for moving.

The President asked Mr. Brown to serve as Business Manager of Yearbook in event Mr. Ritter was unable to serve, to which Mr. Brown agreed.

Receipts to date totaled \$988.23, and expenses \$504.67, or a net balance of \$483.56, according to Treasurer's Report.

Fresh Egg Committee: Chairman Snoddy reported there was little to report on the Fresh Egg Program, except that plans were being made by the Poultry Department for a new type of educational program.

It was moved and seconded that the same appropriations for Fresh Egg Work and Pullorum Testing as in 1943 be requested in the 1945 Biennial budget of the State.

Legislative Committee: The licensing feature for poultry buyers in the 1943 Legislature was discussed, and the President reviewed experiences with same. This is to be taken up at winter meeting for further study.

Russell Hawes discussed the need for an Egg Sizing Law in Maryland and requested the Council to consider sponsoring the passage of such a law. The President referred this to the Resolutions Committee.

The Resolutions Committee submitted the following resolutions, which were adopted singly and as a whole by motion of Mrs. Hopkins, seconded by Mr. Coudon.

RESOLUTIONS

No. 1. WHEREAS, during the present war emergency the poultry industry has naturally been confronted with unusual conditions apparently warranting the establishment of price control measures by the Federal Government; and

WHEREAS, it is apparent that within due time following the cessation of hostilities changes will occur with respect to the probable volume of eggs and chicken meat required for domestic civilian consumption; and

WHEREAS, it is the opinion of the members of the Maryland State Poultry Council that in normal times the production of eggs and poultry meat should be, for the most part, relatively free of Federal price control measures;

THEREFORE BE IT RESOLVED, that it is the consensus of opinion of the members of the Maryland State Poultry Council that price support measures as provided in the Steagall Act should not be applied to the production of eggs and poultry meat, and

FURTHER BE IT RESOLVED, that a copy of this Resolution be sent to Leon Todd, Secretary of the National Poultry Defense Committee.

No. 2. WHEREAS, for several years, egg price quotations in the Baltimore press have been very unsatisfactory, both from the standpoint of producers and consumers;

THEREFORE BE IT RESOLVED, that this Meeting request the Chairman to appoint Messrs. R. Hawes, J. Snoddy and Wade Rice as a committee to work out provisions for the quotation of egg prices on a graded basis.

No. 3. WHEREAS, it is felt that the passing of an Egg Sizing Law would stimulate interest in the administration of the Maryland Fresh Egg Law and otherwise be beneficial to the industry,

THEREFORE BE IT RESOLVED, that this meeting request the Chairman to appoint Messrs. R. Hawes, J. Snoddy and Wade Rice as a committee to study the advisability of securing passage at the next Legislature of an Egg Sizing Law.

No. 4. WHEREAS, it has become apparent to all concerned that the work of the Poultry and Egg National Board has been of tremendous importance and value to the Poultry industry from the standpoint of increasing the per capita consumption of eggs and poultry meat,

THEREFORE BE IT RESOLVED, that it is the feeling of the members of the Maryland State Poultry Council that the Poultry and Egg National Board should receive the wholehearted support of all branches of the poultry industry and allied interests.

Eleventh Annual Winter Meeting

Baltimore, Md., January 10, 1945

President Harry H. Rieck addressed the meeting informally, citing the growth of the industry in Maryland and its advancement from second to first place among the agricultural commodities in producing gross income to farmers of Maryland. He pointed out that while much of the recent growth was due to war food demands for meat for both military and civilian needs there were many indications that poultry products would maintain their No. 1 position in Maryland agriculture in the post-war period.

This means that "boys clothing" no longer fits "the man" and present State and Federal services and appropriations designed to meet industry problems in the state are in sore need of complete reorganization and expansion, if these services are to do the job they are designed for, he pointed out.

To maintain the progress made by the industry in recent years more and better service on marketing and economic problems of the industry by State and Federal Agencies is badly needed. The importance of the industry in Maryland and particularly on the Del-Mar-Va Peninsula is revealed in the figures on the broiler, hatchery, turkey and egg phases of the industry, and especially by W.F.O. 119, freezing poultry in the Del-Mar-Va area first among areas for Army purchase, he pointed out.

W.F.O. 119 on the peninsula is working to the interests of producers and local handlers better than had been anticipated, and the army is getting the broilers.

Production of broiler chicks by hatcheries now exceeds present demand and reached a total of 3 million chicks for the week of November 16, and is now about 2½ million weekly. There are processing facilities on the Peninsula for about 2 million weekly, and the question of what to do with the surplus above local processing capacity now faces the industry. Releasing these birds for civilian market appears to be the only solution.

THE OUTLOOK FOR VITAL INGREDIENTS AND FEED SUPPLIES FOR 1945

C. D. CASKEY, Southern States Cooperative, Inc.

The past two years have been trying times for feed manufacturers and feeders as well. As we looked ahead two years ago, we could hardly foresee all the problems with which we were to be confronted. We knew that animal proteins were going to be short in supply because of reduced production and the complete cessation of imports. We have been through a period of short grain supply.

You are all familiar with the past. What of the future? At the moment, the supply picture in general is quite encouraging. In discussing the various ingredients, I want to divide them into the following groups:

1. Grain and Grain By-Products.
2. Proteins.
 - a. Vegetable protein.
 - b. Animal protein.
3. Vitamin Carriers.
4. Minerals.
5. Some special and critical ingredients—labor and transportation.

The grain crops just harvested were near record levels, being only 1% below last year. Thus, we have available almost as much grain as last year with fewer numbers of livestock to be fed. This means that per animal unit we have about 10% to 12% more feed grain than last year. You may ask "So what? we ran out of corn last summer and fall. Will we be out again this summer?" Our guess, based on information and opinions from many sources, is that corn will be available throughout the year. The government is building a stock pile of corn to take care of war industries so that it will not be necessary to seize corn in elevators or embargo shipments as was done last summer. At that time corn was diverted to starch manufacturers by government order. This building of a stock pile will allow normal trade practices to prevail and will have a stabilizing influence on the market.

Another very important factor in the corn picture is the marked reduction in the hog population. The Fall pig crop was 34% smaller than a year ago. Statisticians tell us that the expected number of sows to farrow this spring is 7% below last spring, which in turn was well below the record year before. While in 1943 the hogs were getting the grain, especially the corn, they will consume considerably less this year. It is expected that considerably less wheat will be fed this year than last, but this can readily occur since record crops of corn and grain sorghums were harvested the past fall. So much for the grains.

The grain by-products are likewise in fairly abundant supply. Bran and middlings have been more abundant recently than for some time. In fact, for a while it was unnecessary to purchase clear flour on a tie-in basis in order to be able to secure some of these mill feeds. The distilleries are making alcohol at full capacity, thereby making available large quantities of distillers' dried grains and distillers' solubles.

The protein picture, while considerably improved, is still not as bright as that just given on the grains. The vegetable proteins have been quite plentiful during the past two or three months, but at the moment are hard to buy. The total supply of protein is slightly smaller than

last year, but with fewer livestock it should be sufficient to take care of the needs. The protein conservation program in effect a year ago, together with the use of synthetic urea in dairy feeds, helped immeasurably in spreading a limited supply of vegetable protein. This year a general swing has been made towards higher protein feed; urea is being eliminated by many manufacturers and, hence, the large use of vegetable protein meals may cause another squeeze during the spring feeding season. Linseed meal production is down considerably, which again causes a larger usage of the other oil meals.

Animal proteins will continue to be scarce throughout the coming year. This is particularly true of fish meal, which cannot be secured just now. Only those people who purchased months ago and in most cases took delivery at that time have ample stock of this material.

Meat scraps were plentiful for a while, even to the point that they were selling below ceiling. The feed manufacturers and feeders learned during the past two years how to make and use feeds containing small amounts of animal protein. In the future, the law of supply and demand will dictate the price as well as the extent to which feeders will use meat scraps. As long as ample quantities of soybean oil meal are available at reasonable costs, meat scraps will tend to come down to the same price per unit protein. We believe that livestock will not suffer this year on account of protein.

Now for the vitamin carriers. Vitamin "D" has never been a problem during this war. Artificially activated animal sterol has been adequate to take care of the poultry needs, while irradiated plant sterols have furnished ample quantities of vitamin "D" for other livestock.

There appears to be ample stock of "A" oil to meet the nation's needs. Alfalfa meal, ordinarily used to furnish vitamin "A," as well as other factors in poultry mashes, is plentiful. Production of this item has been increased to meet the large demand, thus giving the livestock industry plenty of this ingredient.

Vitamin "G" or riboflavin was really one of the scarce items early in the war. Dried whey production was down, dried milk was diverted to human use and limited amounts of distillers' solubles were available. Today, however, the production of distillers' products such as BY Feed, Curbay B/G, distillers' dried solubles, the production of fermented whey concentrates and the production of synthetic riboflavin has solved the vitamin "G" problem. One producer of synthetic riboflavin advertises "Vitamins by the Ton." When you consider that one ton of synthetic riboflavin will fortify over 400,000 tons of a Starting and Growing Mash, you can readily see that production of this product is ample for the feed trade. Distillers have greatly increased their capacity for production of distillers' solubles, which again has helped ease a tight situation.

Early in the war the problem of supplying suitable phosphorus carriers to poultry mashes containing large amounts of soybean meal

was extremely difficult. Bone meal was so scarce and the demand for phosphorus so great that the War Food Administration became concerned and appointed a committee to investigate the production of suitable phosphorus supplies. Many feed and the so-called colloidal phosphates all contain dangerous amounts of fluorine. While colloidal phosphate might contain somewhat less fluorine than rock phosphates, its phosphorus content is also low so that its ratio of fluorine to phosphorus is unsatisfactory. Several processors developed processes for removing fluorine from rock phosphate so that today ample supplies of the defluorinated phosphate are available for use in poultry and stock feeds.

The picture which I have tried to give you is fairly bright. In general, the feedstuffs will be available in sufficient quantities to meet the needs of the livestock industry. The critical ingredients are labor and transportation. Labor to load cars. Labor to manufacture feeds after they arrive at the manufacturers' plants. With labor controls and further tightening of draft regulations, it may be possible that the lack of labor can seemingly turn an ample supply of feedstuffs into a shortage, especially in this deficit area. Transportation, or rather a lack of it, can likewise upset a feed manufacturing schedule. During the past several days rail traffic has been almost at a standstill in Buffalo and in some Midwestern areas due to deep snow and freezing weather. Unless the feeds move from surplus areas to deficit areas, they cannot be utilized. Rail equipment is getting heavier use than ever. It is getting old and more breakdowns are occurring daily. Transportation is a vital ingredient that is in short supply.

In summary—Grains and Grain by-products are fairly abundant.
Protein in total, adequate, but one or two will be short.
Vitamins—no worry here.
Minerals—plenty of suitable minerals available.
Labor and Transportation—May be the limiting factors
in the feed supply situation
in this area.

More Work With Less Effort: J. C. Taylor, Extension Poultry Husbandman, New Brunswick, N. J., discussed this subject informally, and with a short motion picture illustrated the combining of operations in egg grading to save motions by organizing the work on a suitable table at proper height for the operator. Other operations such as feeding chicks and the handling of feed were simplified to illustrate the principle of speeding up work with fewer motions. Use of labor-saving devices was also illustrated.

PRODUCING AND MARKETING QUALITY EGGS

CARL O. DOSSIN, Pennsylvania State College

The following practices have been emphasized as being important for the production of quality eggs:

1. Maintain a temperature under 65 degrees in the egg cellar.
2. Maintain a relative humidity of 75 percent in the egg cellar.
3. Gather eggs three times daily.
4. Cool eggs quickly.
5. Pack eggs daily.
6. Pre-cool egg cases.
7. Market eggs twice a week.
8. Keep birds confined.

In addition to the practices suggested, a sound poultry feeding and management program should be followed. Clean nesting material, clean dry litter, screened perches on the dropping boards and narrow perches on feeders, nests and drinking fountains are factors in the production of clean eggs. Feeding an adequate amount of shell-forming material and some source of Vitamin D are essential to the production of eggs with sound shells. The males should be removed from the laying flock at the close of the breeding season.

During the past year visits were made to many Pennsylvania farms consigning eggs to the egg auctions to learn the effectiveness of the Quality Egg Program. It must be remembered that the cases of eggs sold at the auction have only 100 of the eggs in them inspected and a 10 percent tolerance of eggs in the next lower grade is permitted. When gathering the information used in this summary, the percentage of fancies was taken for the two sales previous to the time of the visit for it was felt that this would give a truer picture of the results obtained under conditions which existed at the time the visit was made.

Summary of Quality Egg Program

The following summary brings out that each step in the program is important and the production of a high percentage of fancies is dependent upon following the entire program. One should remember when studying the table showing the effectiveness of each individual practice that no attempt was made to eliminate the influence of the other factors upon the individual one studied. For example, those farms having a humidity of over 75 percent in their egg cellars may have followed all of the other steps in the program.

	No. Farms	% Fancy
Followed all practices.....	4	98.75
Number practices neglected 1.....	16	95.4
Number practices neglected 2.....	28	52.3
Number practices neglected 3.....	16	39.4
Number practices neglected 4.....	12	19.0
Number practices neglected 5.....	5	4.0

	Followed Recommendations		Did Not Follow Recommendations	
	No. Farms	% Fancy	No. Farms	% Fancy
Humidity over 75%.....	34	83.1	47	30.9
Gathered three times daily.....	51	74.6	30	15.8
Pre-cooled cases	58	58.9	23	37.5
Packed daily	60	57.5	21	39.3
Birds confined	76	54.6	5	22.0
Temperature under 65°.....	59	53.6	22	50.7
Cooled quickly	78	53.3	3	40.0
Marketed twice a week.....	36	50.7	45	54.4

Egg Cellar Temperature Under 65 Degrees. A fertile egg starts to develop at about 68 degrees Fahrenheit, so eggs should be held at a temperature below this point. Another reason for advocating a temperature under 65 degrees is that molds do not develop as rapidly at low temperatures. Eggs held at real low temperatures will sweat when brought into a warmer atmosphere. To maintain a temperature below 65 degrees in the egg room in the summer months usually requires that the cellar be constructed as much as possible below ground and a building constructed over it or else covered with heavy coating of earth. The windows should be shaded by planting shrubbery in front of them. From observations made the indications are that a temperature under 45 degrees is not to be advocated because of the difficulty in maintaining satisfactory humidity.

Relative Humidity of 75 Percent in the Egg Cellar. The indications are that a relative humidity in the egg room of 75 percent is very important if the eggs are to look good under the candle. Observations on Pennsylvania Farms indicate that if the correct temperature is maintained and the entire program followed, there is no need to have extremely high humidity. Farms maintaining a temperature between 50 and 60 degrees Fahrenheit in their egg rooms made a high percentage of fancies, even though the relative humidity approximated 70 percent.

Whenever relatively high humidity is maintained, the danger from molds is increased. Observations in the field indicate that the mold problem is more acute where earth floors are used in the egg rooms than when concrete, stone or brick floors are used. The indications are that the use of a small house fan to circulate the air in the egg room will help to eliminate the mold problem. The fan will also help to remove the animal heat from the eggs. In the summer, when it may be cooler outside than it is inside, the window in the egg room should be open. The lowest possible temperature that can be obtained in the summer will help to eliminate this problem.

The care of empty egg cases is a definite factor in preventing the mold problem. Only one to two days' supply of empty cases should be held in the egg room prior to the time they are used. The main supply of empty cases should be held in a clean, dry room.

Gather Eggs Three Times Daily. It is interesting to note the difference in the number of fancies made by those who gathered three times daily as compared with those who neglected this practice. Following this practice would be worth while alone from the standpoint of reduction in breakage and soiled eggs.

Cool Eggs Quickly. Studies conducted at the University of Missouri bring out that eggs can be cooled quickly by using wire baskets for gathering and having a small house fan circulating the air in the egg room. Removing the animal heat quickly from the eggs is an important factor in egg quality. Eggs that are packed while still warm lose quality very quickly.

Pack Eggs Daily. It was very interesting to note that those who packed their eggs only twice a week made a very low percentage of fancies, even though they followed the rest of the program. If they packed their eggs daily after the animal heat was removed or every other day and followed the rest of the program, most of their eggs made the fancy grade.

Pre-Cool Egg Cases. A dry egg case is a thief. It will absorb approximately one pound of moisture. Unless the empty cases are put into the egg room with low temperatures and high humidity for a day or two in advance of the time they are used for packing eggs, it is almost impossible to make a high percentage of fancies even though the rest of the program is followed.

Market Eggs Twice a Week. From the table one would get the impression that marketing once a week was more desirable than marketing twice a week. Those poultrymen who were marketing once a week realized that they had to take better care of their eggs if they wanted to make the fancy grade, while the others in many instances became careless of their egg care because they felt marketing twice a week would offset neglect of other practices in the program. All poultrymen should be encouraged to market as soon as possible after they are laid. They should, however, follow the other practices in the program.

Keep Birds Confined. Experimental work has shown that green feed will affect the color of the egg yolk. Market requirements insist that eggs when candled have a dimly visible yolk shadow. Dark yolks usually have a darker yolk shadow when candled. Keeping the birds confined will also reduce the number of soiled eggs.

BUSINESS SESSION

President Rieck called attention to the annual membership drive of N. E. P. P. Co. and called upon all hatcherymen, producers and other members of the industry to support N. E. P. P. Co.'s program for the industry in the Northeast.

A roll call of delegates showed five county poultry associations—The Westminster Coop., Tri-County Poultry Association, Maryland Turkey

Producers, and the newly organized R.O.P. Poultry Breeders' Association, with proper credentials submitted. The Secretary stated that application for membership with dues was in hand for the Maryland R.O.P. Poultry Breeders' Association.

Mrs. Hopkins moved, Mr. Snoddy seconded, that the Maryland R.O.P. Poultry Breeders' Association be admitted to membership in the Council. Motion carried.

Treasurer's Report. The Treasurer reported that receipts for the year totaled \$2,298.44, disbursements \$1,665.36, a balance of \$663.08, which with 10 \$100 War Bonds showed net assets of \$1,633.08. Mr. Brown moved, Mr. Snoddy seconded that the Treasurer's report be accepted. Motion carried. Messrs. Spearin, Potts and R. C. Morris were appointed as auditing committee by the President.

Executive Committee Report. The Secretary reported that the directors and executive committee had held no meetings separate from the annual meetings in 1944, and that action by members of the executive committee were limited to carrying out the policies outlined in motions and resolutions of the Council during the year. In view of this, no formal report has been prepared.

Yearbook. The Secretary reported that the Treasurer's report showed the accounts to date of the 1944 yearbook. On the 1945 yearbook, advertisements secured and expenses indicated that a net revenue of approximately \$400 might be anticipated for the Council in 1945 from the yearbook.

Mr. Brown moved, Mr. Snoddy seconded that the Executive Committee be authorized to handle the yearbook matter for 1945-46. Motion carried.

Fresh Egg Law. Mr. Snoddy reported that work on the Fresh Egg Law Program was at a standstill, since no one had been employed by the Extension Service to do the educational work and inspections for compliance with the law. He stated that he had brought the matter to Dr. Symon's attention, and the difficulty in securing qualified help was holding up progress on the program.

He also reported that the special committee composed of Mr. Hawes, Mr. Rice and himself regarding an egg-sizing law had drawn up a proposed law which had been turned over to the Legislative Committee for its consideration and action with the Legislature.

President Rieck appointed the following nominating committee: L. L. Colona, Samuel Ahmuty, Geo. C. Brown, Mrs. A. W. Sattler, and Melvin Uphoff. He also pointed out that it was time for the Council to have a new president, since he had served for several years and other good officer material should be given the opportunity to serve.

President Reick requested consideration of the matter of making the immediate past president of the Council a member of the Executive Committee in order that his experience and judgment would be available to the committee.

Mrs. Hopkins moved, Mr. Potts seconded that the immediate past president be made a member of the Executive Committee. Motion carried.

Mr. Hawes reported that upon request quotations which reflect quality values in eggs were now being published by the market news service for the Baltimore market.

Summer Meeting. The Secretary requested consideration of the advisability of holding a Summer Meeting this year in view of the government ban on conventions in excess of 50 people. After some discussion, Mr. Snoddy moved, R. S. Brown seconded that the directors be polled later to decide if it was advisable to hold such a meeting. Motion carried.

Report of Resolutions Committee:

RESOLUTIONS

1. WHEREAS, standards have been raised in pullorum-testing work with a view toward eradicating pullorum disease from all breeding flocks in Maryland, and

WHEREAS, funds now available are insufficient to achieve this desirable objective,

THEREFORE, BE IT RESOLVED, that through the Maryland Farm Bureau the State Legislature be requested to increase the appropriation for pullorum-testing work to the extent of \$20,000 annually.

2. WHEREAS, within the past few months one of our poultry leaders in the person of Mr. Neal Truslow, of Chestertown, has unfortunately passed away,

THEREFORE, BE IT RESOLVED, that the Maryland State Poultry Council expresses its profound sympathy to the family and to wish his son John the best success in carrying on the Truslow enterprise.

3. WHEREAS, no appointment has been made with respect to a permanent Director of the State Live Stock Sanitary Service,

THEREFORE, BE IT RESOLVED, that the Maryland State Poultry Council favors the appointment of Dr. A. L. Brueckner as permanent Director.

AND FURTHERMORE, BE IT RESOLVED, that a copy of this resolution be presented to the Chairman and Secretary of the State Board of Agriculture.

4. WHEREAS, because of lack of adequately defined responsibilities and inadequate help the supervision of R.O.P. flocks, hatchery flocks and hatcheries participating in the Maryland and National Poultry Improvement Plans is inadequate to meet the basic needs of the industry,

THEREFORE, BE IT RESOLVED, that the State Board of Agriculture be requested to place direct responsibility for the administration of *all aspects* of the Maryland Poultry Improvement Plan work under a single full-time man with adequate assistants.

5. WHEREAS, there is urgent need for assistance in clerical work of the Maryland State Poultry Council to adequately record proceedings of meetings to establish its policies on behalf of the industry,

THEREFORE, BE IT RESOLVED, that a Recording Secretary be employed on a temporary basis.

6. WHEREAS, there has been a temporary suspension of activities in the administration of the Maryland Fresh Egg Law,

THEREFORE, BE IT RESOLVED, that funds originally appropriated for administering the Law be used for that purpose only.

7. WHEREAS, the present appropriation of \$7,500 is inadequate to properly enforce the Maryland Fresh Egg Law which is of such vital importance to Poultry Producers,

THEREFORE, BE IT RESOLVED, that an appropriation of \$10,000 be requested to properly administer the Maryland Fresh Egg Law and the Egg Sizing Law.

Mrs. Hopkins moved, Mr. Snoddy seconded that the foregoing resolutions be adopted. Motion carried.

R. S. Brown moved, Mr. Snoddy seconded that an appropriation of \$2,500 for egg sizing law be requested and added to Fresh Egg Law appropriation of \$7,500 making a total of \$10,000 for both. Motion carried.

Nominating Committee: Mr. L. L. Colona, chairman of nominating committee reported the following nominations by the committee: President, J. W. Snoddy, Riverdale; 1st Vice-President, W. A. Spearin, Salisbury; 2nd Vice-President, Wm. J. Flohr, Union Bridge; Treasurer, Mrs. W. W. Hopkins, Cordova; Secretary, W. H. Rice, College Park. Director to N. E. P. P. Co., Harry H. Rieck, Preston. Delegates to N. E. P. P. Co., Geo. C. Brown, Hampstead; Mrs. A. W. Sattler, Monkton. Director to Farm Bureau, J. W. Snoddy, Riverdale. Delegates to Farm Bureau, Mrs. H. T. Willilams, Worton; D. Ernest Mathews, Salisbury. The President called for any nominations from the floor. Mr. Morris moved, R. S. Brown seconded that the nominations be closed and the Secretary cast a unanimous ballot for the nominees. Motion carried and the Secretary cast a unanimous ballot for the nominees.

Mr. Snoddy assumed the chair upon invitation from Mr. Rieck and pointed out that in accepting this office it was to be understood that he was to have it for this year only, and would have to lean heavily upon Mr. Rieck, Mr. Spearin and others, by virtue of being so closely tied down with work at home and his health not being too good. He suggested the Council give a rising vote of thanks to Mr. Rieck for his fine services to the Council and the industry during the past several years. The rising vote with applause was given.

Auditing Committee: W. A. Spearin, chairman of auditing committee reported that examination of the books of the Treasurer showed the accounts in balance and books in good shape.

Mr. Ahmuty moved, R. S. Brown seconded that the Auditing Committee's report be approved. Motion carried.

Meeting adjourned 5:40 P. M.

OUTLOOK FOR GOVERNMENT AND CIVILIAN DEMAND FOR POULTRY AND EGGS IN 1945

Remarks of W. D. TERMOHLEN, Assistant Chief, Dairy and Poultry Branch, Office of Marketing Services, War Food Administration, Washington, D. C.

I know it is customary for a speaker to first tell his audience that "he is glad to be here tonight." Well, I am glad to be here—all traditional greetings and salutations put aside. This, I believe—is an excellent chance for us to get some good old-fashioned shop talk off our chests.

First, however, as a representative of the War Food Administration, I want to go on record as saying that the poultry industry is one that has done a really top wartime job. Back in 1941, when the first trickles of lend-lease food began to move out of the country, you were asked to begin a program of expansion. You took a firm hold on that job then—and you have performed it in full measure.

In 1941, in 1942, in 1943, and again in 1944, we have seen poultry and egg production go over the top of farm goals. In fact, in 1944, when it comes to eggs, I expect we went a little bit over the top. You will remember that the national goal for farm egg production called for 4,597 million dozen eggs. When the figures were totaled up at the end of this year, the record hit about 4,800 million dozen. This, with a record non-farm production, made the total 1944 egg production more than 5,200,000,000 dozen.

Now, that's a lot of eggs, as anyone connected with production and handling of eggs can testify. I'm going to be perfectly frank with you about 1944—we had plenty of trouble with our eggs. We didn't have to put our eggs all in one basket, but there were times when more than one basket was full to overflowing.

You will recall that egg output was much heavier than normal in December 1943,—so heavy, in fact, that prices began to drop sharply. In January of 1944, WFA took the first of a series of price-support measures to assure producers of egg prices at the 90 percent of parity level.

In that month, a dried egg-purchase program was put into effect; this resulted in strengthening sagging Midwest egg prices. But the impact of the heavy 1944 production began to be felt in other areas as well, and WFA followed through with other price-support measures, which included:

A carlot purchase program to support lowered prices in New England, later extended on a national basis.

The 10-case purchase program on a graded basis in the Southeastern States.

A 185-million pound dried-egg procurement program for the year.

These programs held the market reasonably stable until the end of March—in spite of extremely heavy production. The flush season was bringing an unprecedented number of eggs into the market. Price broke sharply in many areas, and even more extensive measures were taken by WFA to support the market.

On April 5, WFA announced that current receipt eggs would be purchased at 29 cents a dozen upon certification that eggs were "straight run" and that producers had been paid at least 26 cents a dozen, loose basis. Agents were appointed to buy eggs for WFA account on the Chicago and New York Mercantile Exchanges. Further, a major change was made in the pricing of dried eggs, when on April 21 all dried-egg purchase contracts were amended to a basis of the cost of the raw material used, plus fixed processing charges. Later, on May 1, all egg driers were notified to obtain certifications that producers had been paid at least 26 cents per dozen, loose basis, for eggs used for drying. On May 10, this certified price was raised to 27 cents per dozen. In addition, other changes were made in the current receipt purchase program, and current receipt eggs at 29 cents a dozen were added to the grades of eggs which could be purchased on the mercantile exchanges.

When the flush season was over and marketings leveled off, the current receipt program was discontinued early in July. During these 1944 buying operations, WFA purchased something like 5,600,000 cases of shell eggs—most of which have been disposed of—and made dried egg purchases above the level of the 185-million pound program as first announced.

Now, these buying operations cost a considerable amount of money, but the net cost of the program was small indeed compared to the greater returns to farmers when you consider that the average farm price of eggs during the year was above the 90 percent of parity level.

Whether we will have the difficulties in marketing eggs this coming spring that we experienced last year remains to be seen. You may be sure the WFA will use all feasible means to avoid it. For one thing, we are going to concentrate our drying program during the heaviest production months. For another, we are preparing an educational campaign to get greater consumer use of eggs during this season. Consumers can help solve this seasonal problem, if it occurs, by eating more eggs when they are plentiful and relatively low-priced. In addition, we must take all possible steps to use transportation, storage, packaging and labor facilities most efficiently—since the situation on all these important factors will remain tight.

Large as poultry and egg production have been during the war years, 1945 promises to be another big year. Last fall—in November specifically—WFA announced a preliminary farm egg goal of 3,920 million dozen. I want to make clear that this goal was only a suggested one—subject among other factors, to review by State goals committees. It was based on the best information then available regarding demand for eggs for adequate civilian consumption, and for meeting requirements for the armed forces and the needs of our fighting allies.

But we have learned, during these war years, that we can't always set a goal or program and then confidently say that "this is the deal." More often than not it works the other way. We have to redraw our blueprints to meet the rapidly changing fortunes of war, for change seems to be the most certain of all factors in these times.

For example, when the preliminary 1945 egg goal was worked out, we had to base it on the most accurate information available as to prospective dried egg reserves, probable demand from all claimants, adjustments that might have to be made on farms, and other factors as well. We got in touch with all agencies having need for dried eggs to get their full requirements. Thus, when all factors were brought together in considering the goal, it looked then like we could meet all our needs for fresh, dried, and other processed eggs with the goal of 3,920 million dozen eggs.

Further, it looked like we could meet all our dried egg requirements with holdings anticipated to be on hand January 1. But additional outlets for dried eggs have materialized since then, and there was need for re-examining the entire situation. Let me make this clear. I am not being critical of any agency or group. Their requirements change, too, and they, too, must alter plans as wartime necessity requires.

So, as the entire food requirements unfolded, more became known as to needs—particularly as territories have been freed from the Nazi hold. In short, the changed picture brought the necessity of making a change in our suggested egg program.

More specifically, our additional outlets for eggs include shell eggs for the British, dried eggs for feeding the people in liberated countries.

These outlets—let me remind you—may also be subject to change as the progress of the war changes.

Consequently, to take into account recommendations made at State goals meetings as well as the additional needs, the War Food Administration last Saturday announced a revised goal of 4,350 million dozen eggs. This is 9 percent less than the 4,800 million dozen produced last year, but 10 percent above the suggested preliminary goal of 3,920 million dozen.

This goal will provide 347 eggs for each civilian in 1945, which is equal to the record consumption of 1944, and an increase of 49 eggs over the pre-war 1935-39 average consumption. It will also provide for all military requirements for shell and dried eggs, and with the reserve of about 125 million pounds of dried eggs carried over from 1944 surplus production, it will take care of all lend-lease and other possible outlets.

If all these outlets are supplied, theoretically speaking at least—we would have no reserves of dried eggs at the end of 1945.

Despite the fact that we have increased outlets for dried eggs, there will be no questions about civilians having plenty in 1945. At the same time, we have a place to market all the eggs that civilians can't use, at prices fair to farmers. So, there should be little question about the WFA being able to support egg prices for farmers in 1945.

The price-support program on eggs, as you know, was recently announced as 27 cents a dozen for candled eggs, and 24 cents per dozen on straight run eggs. As during the past year, the producer price will be supported by purchases from dealers upon certification that they in turn have paid no less than support price to producers.

In view of the prospective needs for eggs for 1946—as near as they can be determined now—producers should aim at raising about the same number of chickens for flock replacement as they raised in 1944. Further, producers are urged to get early hatched chicks. These generally give better returns to the poultryman, furnish more eggs in the fall and early winter when egg production is seasonally low, and help minimize during the months of the flush spring season.

Because of prospects of somewhat smaller production of meat in 1945, and increased war demands, there is greater need for poultry meat. On a national scale, production goals for broilers are the same as those for 1944. From all information at hand, commercial broiler producers in the Del-Mar-Va area are doing a bigger job than ever before—and I expect that in a short time we shall see the largest volume of broilers and fryers on record coming from this area.

We know that there has been considerable concern about why the 100 percent set-aside order was first put into effect in the Del-Mar-Va and Virginia valley areas. There were several reasons for this. First,

as you know, the Army was then something like 110 million pounds short of chicken for the early months of this year. When you need something in a hurry, you have to go where it is, and about 40 percent of the broilers produced commercially come from the Del-Mar-Va area. Next, there are plenty of processing plants in this area to produce dressed chicken for Army requirements. And third, the area is close to points of export shipment.

In line with the original announcement, the order has since been extended into two other areas—the heavy producing counties of Georgia, and the so-called Arkansas area.

We fully realize that this action was bound to work some hardships on producers, processors, and handlers, and that many consumers would have less chicken than they'd like to have. But chicken is one of the important "morale" foods needed and liked most by our fighters, and I'm sure we can all do with a little less of one of America's favorite foods so that it will go first to our fighters. During the first 3 weeks the order was in effect, the Army procured about 4,500,000 pounds of poultry from the Del-Mar-Va and Virginia Valley areas.

As long as the meat supply situation remains tight, and as long as our armed forces have heavy chicken requirements, it appears that there will be ample outlets for broilers and fryers. However, when a broiler raiser gets ready to start a new brood, it is always advisable to consider possible changes in demand. For the next several weeks, we can afford to look through rose-colored glasses. But it is my opinion that this spring—perhaps in April—the industry and the government should take a careful inventory of future prospects for broilers and fryers. Then, we can shape our plans for production of these types of chickens next summer and fall.

Demand for turkeys this year will in all likelihood be strong, and the goals call for the same level of production as in 1944. We should aim again at raising turkeys early enough to meet the needs of our armed forces for holiday birds.

As to price support on poultry, the WFA has announced that until December 31, 1945, it will support prices to farmers for chickens and turkeys at 90 percent of parity. This does not include chickens that weigh less than 3½ pounds live weight.

As poultrymen make their plans for 1945, it will be well to keep in mind that no matter how strong our position may be, good flock management and efficient marketing are always good profit insurance.

We can expect that poultrymen will be in a relatively good position for feed this year. Nature was generous in 1944, and our corn crop—totaling 3,228,000,000 bushels—was the largest on record. Other grain crops were from good to excellent. This will make the 1945 situation

much different from that of 1944, when we would have had a real problem on our hands if poultrymen had not cooperated in adjusting their output to levels consistent with the shorter feed supply.

Our egg goal can be reached this year with normal production from the estimated 475 million hens on farms January 1. While we are not calling for a flock reduction, it will simply be good management to carry on a sound culling program for efficient production.

Likewise, we should aim to give consumers a quality product. This is particularly true from the long-time point of view if we wish to maintain a high level of egg consumption. In 1944, our civilian per capita egg production was 448 eggs . . . our per capita consumption was estimated at 347 eggs. This left 101 eggs on the per capita basis for meeting lend-lease and military requirements and to be used for hatching purposes. During the 1935-39 period, our average per capita production was 308 eggs, while the average consumption figure was 298. These figures bear pretty telling evidence as to why it is now and always will be good business to send a quality product to market.

As we look ahead to our operations in 1945, we know that we have another big job on hand. With the splendid cooperation our industry has shown to date, we know the job will be done. Further, as we look ahead toward the post-war period, I am confident, too, that we can meet the problems that will come with peace. But, until that time comes, we all have but one aim—victory. There can be no other conclusion but that our industry will contribute in full measure to that end.

Following Mr. Termohlen's talk, several reels of motion pictures on poultry breeding and labor saving practices were shown.

ANNUAL MEETING
OF THE
**Maryland Nurserymen's
Association**

Baltimore, Maryland, January 10, 1945

President Dan Stoner opened the annual winter meeting with a discussion of the relationship of the Maryland Nurserymen's Association to the Farm Bureau. He pointed out the nurserymen are closely associated with and dependent upon the land for their livelihood, and stressed the importance of maintaining close association with the Farm Bureau for mutual benefit.

The Maryland Experiment Station and its work for nurserymen were outlined briefly by Dr. W. B. Kemp, Acting Director. He told about some of the current studies, which will result in direct benefit to the nursery industry and discussed needed studies for the post-war period.

"Opportunities and Responsibilities of Landscape Gardening" were discussed by Dr. J. P. Porter, Professor of Landscape Gardening at Cornell University, New York. He reviewed developments since the first World War and potential developments likely to following the present conflict.

Problems involved in identification and control of insect pests of ornamentals were outlined by Dr. George S. Langford of the University of Maryland. He analyzed the credit, as well as the debit side of insect problems. Following a brief discussion of some of the newer insecticides, particularly DDT, colored slides were shown to familiarize the group with ways and means of identifying common insects.

Dr. Cory Honored

A highlight of the meeting was a luncheon in honor of Dr. Ernest N. Cory, State Entomologist, in recognition of 35 years of untiring and useful service to the nursery industry. More than 100 members of the Association and their guests, including Dr. H. C. Byrd, President of the University of Maryland, and Dr. T. B. Symons, Dean and Director of the Extension Service, were in attendance. Dr. F. C. Bishopp represented the Bureau of Entomology and Plant Quarantine of the U. S. Department of Agriculture and the American Association of Economic Entomologists.

Dr. Byrd paid high tribute to Dr. Cory as an entomologist, as a man, and as a friend, and pointed out his achievements in developing the

little-known department of entomology at the University into one that today is worthy of national recognition.

Dr. Symons traced his association with Dr. Cory since 1909, and expressed his sincere appreciation of him as an entomologist and friend.

Others paying tribute to Dr. Cory were Dr. Langford, Joseph S. Merritt, Hale Harrison, Andrew Cohill, Dr. Bishop, Daniel Stoner and Henry Hohman.

On behalf of the Association, President Stoner presented Dr. Cory with a handsome wrist watch. The luncheon was climaxed by presentation of a new *Brassocattleya* orchid, developed by John and Katherine Slotter, Jessup, Maryland, and named Dr. Ernest N. Cory.

Afternoon Session

The early part of the afternoon was devoted to selling and marketing problems. F. N. Price Supplee, horticultural merchandiser of Philadelphia, Pa., speaking on "Planning and Building Markets for 1950," particularly stressed what he termed "reason why" selling.

The question of roadside marketing was outlined by William C. Price of Towson Nurseries, and Mrs. Andrew Simon, of Towson. Mrs. Simon stressed the obligation of the salesman to furnish proper and practical cultural directions with the plants sold. Displaying plants to catch the public eye and the handling of plants on the stand so that customer will have as satisfactory a product upon arriving home were emphasized. Mr. Price said that he felt there is a real opportunity in the field of roadside marketing, if a suitable location is obtained and the shop is kept open 12 months in the year, which means that proper accessories must be provided for sale during off-season periods. Most important of all, he said, is to have some one at the shop at all times to greet the people courteously.

An interesting hour was spent in discussing the subject "Operating and Maintaining Satisfied Customers Under Wartime Conditions." Those taking part were: Homer Kemp, Princess Anne; Patsy Donofrio, Westminster; J. H. Burton, Hyattsville; F. N. Price Supplee, Philadelphia; J. Bryant Morrison, Seat Pleasant; and Edward Stock, Jr., Bethesda.

A review of information collected through contacts with nurserymen and the gardening public on "What is Ahead in the Nursery Business" was given by Professor A. S. Thurston of the University of Maryland.

Officers for the Coming Year

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